Clinical Lecture
ON
PULMONARY PHTHISIS, WITH FIBROID CONTRACTION OF THE RIGHT LUNG;

DISPLACEMENT OF THE HEART UPWARDS AND TO THE RIGHT; ANGULAR BENDING OF THE AORTA, AND DILATATION OF THE ANGLE, SIMULATING A CONSIDERABLE ANEURISM; DEATH FROM MALIGNANT DISEASE OF THE COLON AND PERITONITIS, ETC. ETC.

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(Concluded from p. 82.)

READ in the light of the facts and explanations given, the changes which took place in the size and form of the pulsating area are not far to seek. First: We had a small circular area, about one inch in diameter, making its appearance in the second intercostal space; evidently indicating the commencing bend on and outward displacement of the aorta, from the upward displacement of the heart. Second: After a time this pulsating area rapidly increased in size, until it came to occupy an oval area extending longitudinally over the three upper intercostal spaces. This was the result of the further contraction of the lung. It indicated progressive doubling of the aorta upon itself, increasing obstruction to the flow of blood, and pressure upon, with dilatation of, the angular bend, along with outward and upward displacement of the right auricle and of the pericardium covering both the aorta and auricle. It was further distinctly noticed during life that in the first and second interspaces, the portion corresponding with the displaced and dilated aorta, distinct expansile pulsation, with systolic fremitus and double impulse &c., were well marked; while over the lower portion (that represented by the auricle) the pulsation was feebler and more flickering and the sounds were less distinct. Finally, a change in shape and position to that represented in the diagram (Figs. 2 and 3, p. 82) took place towards the termination of life; because a continuance and increase of the same causes—perhaps favoured by the rapid ascitic accumulation in the peritoneum, which would, on the one hand, diminish the arterial tension in the aorta, and, on the other hand, exercise an upward pressure on the heart, liver, and lungs—led to further displacement of the sac with its contents, until it assumed the shape and position noted towards the end of life, and found after death.

These, gentlemen, seem to me to be the conclusions logically deducible from the facts observed during life, and after death, in this most interesting case. They explain satisfactorily to us how the signs were markedly those of vascular tumour. They also account for what was noted throughout as a remarkable circumstance—viz., that the vena cava had escaped pressure.

I have thought it right, gentlemen, to draw your attention to this rare, interesting, and I believe hitherto undescribed condition, because it must, in future, be taken into account in the diagnosis of aneurism, along with other conditions, such as pulsating empyema, carcinoma, &c., which may simulate that disease. I confess, at the same time, that it will always be a most difficult point in diagnosis to distinguish a bent, displaced, and hyper-distensile aorta—such as we have in this case,—from aneurism. Indeed, the distinction is only one of kind and degree; for this was in reality an aneurismal tumour of all the coats of the healthy aorta—emphatically, in a sense, a *true aneurism*.

In such a case as this, it might be expected that the alteration in the position of the heart, taken in connexion with the signs of contraction of the right lung, would have afforded some clue to the real nature of the changes taking place; and in ordinary circumstances it would. In this case, however, the heart was overlapped by an emphysematous border of the left lung, and its left apex was displaced backwards by a dilated and hypertrophied right ventricle, so that the apex-beat could not be felt, and the left limit of deep percussion dulness could not be accurately determined.

Before passing from this question, it is worthy of note that such persistent distensile pressure must have acted on the healthy coats of the aorta for a period of about three months *without producing atheroma*. Doubtless, if the man's life had not been cut short by those abdominal diseases which we will proceed to consider immediately, the cup-shaped dilatation present at the bend of the aorta would have become the seat of degenerative atheromatous changes, followed by the production of indubitable aneurism in the fullest sense of the term.

The pulmonary phthisis present in this case, which we have already considered, affords an interesting example of the effect of contraction of the lung upon the position, and it may be the function, of an adjacent organ. Possibly it may also offer a clue to the etiology of a certain class of cases of aneurism of the ascending aorta. I shall certainly examine most carefully in future the post-mortem position of the heart and vessels in all cardiac displacements, and aneurisms of this region which have been associated with contraction of the apex of the right lung. The phthisis pulmonalis may further serve as a hint to connect the thoracic diseases in this case with those morbid conditions of the abdominal organs which we now proceed to consider.

On October 23rd this was noted: "The patient has been suffering for the last two days from *pains in the abdomen*. The pains are worst *in the left iliac region, and are not affected by pressure*." On Nov. 7th: "Diarrhœa has been present for the last three days." This diarrhœa was repeatedly checked by treatment, but tended to recur. On the night of Dec. 2nd it was recorded that the patient suffered from very profuse sweating. This persistent pain, diarrhœa, and profuse sweating, supervening on the pulmonary phthisis, were thought to indicate, as they naturally do, secondary phthisical ulceration of the bowels. This diarrhœa continued to recur until the death of the patient.

The post-mortem showed a few transverse phthisical ulcers on the sigmoid flexure of the colon, also on the ileo-cæcal valve. But in the same regions signs and symptoms were now developing which had a different and even graver significance. On Dec. 14th I find this note in the report of the case:—"No return of the diarrhœa since December 11th, but this morning a solid tumour can be felt in the left iliac region. The tumour is about six inches long and two inches broad, hard to the touch, slightly doughy, and lobulated. It is painful on *firm pressure*." The diagnosis then made was that it depended on "fæcal impaction on the sigmoid flexure of the colon, possibly indicating commencing cancer."

Now, before I pass on any further, I wish to draw your attention very particularly to the significance of this sign as an indication of commencing malignant disease. I do not in the least mean to assert that fæcal impaction always means malignant disease of the intestine; on the contrary, we know that it may arise from many causes. I have generally found, however, that in patients presenting a decidedly cachectic appearance, as was the case in J. M——, localised pain, followed after a time by decided fæcal obstruction, coming on insidiously at the seat of the pain, has so frequently been associated with commencing malignant disease that I think in such cases the presence of such a condition should be considered probable. This is more particularly true if the accumulation should manifest a decided tendency to recur at the same spot. Such a tendency, preceded by severe pain at that spot, even although, on clearing out the bowel, no tumour can be felt, where the patient is more or less cachectic, should be looked upon as being at the least of very grave significance. I lay the more stress upon this point because I have frequently seen the removal of such a "phantom tumour" regarded as proof of the absence of any malignant growth, and the tendency of the statements in some of our text-books on this subject is certainly to encourage this error. Most assuredly the fæcal accumulation in this case would have led to a very speedy termination of the patient's life had not the means employed by my resident physician, Dr. Lamb, been completely successful in temporarily overcoming the obstacle. I think it worth while to give you somewhat in detail the means employed in this case, which resulted, after their persevering application for ten days, in complete relief for the time, and the prolongation of the patient's life for about six weeks. If there is one thing more than another that should be impressed upon your minds as prac-

titioners, it is the necessity of persevering with rational means of treatment so long as there are no contra-indications.

From Dec. 14th to the 26th inclusive enemata were regularly given several times a day, but with almost no success. At first a little crumbly faecal matter came away; latterly nothing whatever. On the 16th the pain was still increasing; the tumour remained unchanged, and there were very frequent calls to stool. In the evening the tube of a stomach-pump was passed up to the mass, and an enema of castor and olive oils slowly injected, frequent pauses being made, and the operator's fingers being forcibly thrust within the sphincter whenever the patient manifested any tendency to reject the enema. In spite of every precaution, however, only about one pint of fluid was received, and even that was rejected immediately on the tube being withdrawn. A small quantity of light crumbling matter, almost cretaceous in character, in small masses, the size of peas, came away mixed with granular detritus and fluid. On Dec. 17th the patient continued to pass frequent very scanty motions, the tumour remaining little, if at all, diminished in size.

On Dec. 18th manipulation was tried. The upper end of the mass being fixed, its lower part was cautiously kneaded, and attempts were made to detach parts, and push them down towards the rectum. After some time, when considerable progress had apparently been made, the under-finger of the left hand was introduced as far as possible into the rectum, while the right hand was used to push the mass down from above. Only a few small and detached fragments could be reached, and, as the patient was considerably exhausted, no further attempt was made that night. Dec. 19th: The patient has passed a good deal of faecal detritus, but the tumour is still of considerable size. It is, however, situated lower down than it was before the manipulation. In the evening manipulation was resumed. A lump, the size of a walnut, was removed by the finger, but the main tumour could not be reached from below.—Dec. 20th and 21st: Frequent stools of broken-down matter. The patient has no pain; feels much better.—Dec. 23rd: Tumour quite gone. The bowels continued, with occasional assistance of simple medicine, to act freely.—Dec. 30th: There is this note in the record of the case—"Diarrhœa, four or five motions daily; thin, brownish, and very fetid." Diagnostic note of the same date—"The suspicion of malignant disease of the intestine is considerably stronger than it was. It seems, indeed, probable from the rapid emaciation and cachectic appearance of the patient, and from the persistent very fetid diarrhœa."

At the post-mortem a month afterwards it was found that, in confirmation of the view taken from the commencement, there was situated at the sigmoid flexure a large fungating soft growth, which looked like a sarcoma growing from the mucous membrane. Microscopic examination showed it to be a cylinder-celled epithelioma, a very rare form of cancer. There were several polypus growths from the mucous membrane at different parts of the colon.

For a week, from Dec. 30th to Jan. 5th, the patient was in the country, and his condition during that period was not noted. After his return on Jan. 5th, the abdomen was found to be considerably distended, presenting on percussion drum-like resonance all over; pain recurring, chiefly in the left iliac fossa, but when severe pretty general over abdomen; no tenderness on firm diffuse pressure. Ordered half a grain of morphia.

Jan. 8th.—Evening: Pain in the abdomen severe; subcutaneous needle run through the skin, but nothing injected; relief almost immediate and lasting.—11th: Abdomen tightly distended, but resonant all over; pain recurring in left iliac fossa. No tumour can be felt, though palpation can be thoroughly practised, and causes no aggravation of the pain. Diarrhœa continues; two or three fetid liquid stools daily.—20th: Patient much weaker since last report, nine days. Abdomen dull on percussion laterally and inferiorly, but no fluctuation to be made out. Œdema of both feet, much most marked of right; diarrhœa as before.—25th: Abdomen more distended; dulness increased; distinct fluctuation; no tenderness nor tumour; patient sinking.—27th: Fluctuation well marked in lumbar regions; slight œdema of feet. A diagnostic note was made to the effect that asthenic peritonitis had apparently supervened, probably secondary to malignant disease of the bowel. There was copious hare-soup vomit last night. The liver was again examined, but the dulness was rather increased. Cirrhosis of the liver was conjectured, the only evidence in its favour being a history of intemperance, the amount of the effusion, and the hare-soup vomit. The ascites was certainly peritonitic—probably malignant, possibly tubercular.

Post-mortem examination.—The peritoneum contained 148 oz. of a purulent fluid. The large omentum was fixed by adhesions between the sigmoid flexure, which was distended with faecal matter, and presented those conditions already referred to. The surfaces of the intestines were covered with recently deposited lymph, more especially in the neighbourhood of the sigmoid flexure. The liver weighed 2 lb. 10 oz. Its surface was extremely nodulated, and the organ atrophied. The gall-bladder was distended with inspissated bile of a black colour, and its substance was of a greyish-yellow colour. There were large bands of fibrous tissue dividing the organ into nodules, and producing a state of coarse cirrhosis.

The points I would have you note here are:—Firstly. Cirrhosis may exist in a very marked degree without revealing its presence by any ascites or other characteristic symptom. In M——'s case the coffee-ground vomiting and ascitic accumulation occurred only within a short period before death, and the ascites was really determined by the occurrence of peritonitis, which had its starting-point at the seat of the malignant growth in the sigmoid flexure of the colon. Secondly. When peritonitis is associated with rapid and abundant effusion, it is well to examine the condition of the liver and portal vein. Probably in many such cases it will be found that although there has been no previous ascites, a cirrhotic condition of the liver, or some other obstruction to the portal vein, has so predisposed the patient to ascites, that when peritonitis has occurred rapid and unusually great effusion has been inevitable. The cirrhotic condition of the liver in M——'s case must be attributed to the excessive use of alcohol. The organs affected with cirrhosis from this cause are very different in different cases. Many drunkards never have cirrhosis at all, while in some the liver, in others the lungs, in others the kidneys, and so forth, may be the seat of the morbid change. These differences must be attributed to individual constitutional peculiarities. In certain individuals there exist special predispositions in particular organs to cirrhotic changes. It is believed that a history of previous alcoholic excess is common in cases of the cirrhotic form of Bright's disease; yet in this case an irritation from this cause, sufficient in all probability to induce very marked cirrhosis of the liver, had no such injurious influence on the kidneys, which, although they presented slight traces of congestion, were otherwise normal in appearance and consistence.

I do not think, gentlemen, that the time spent on this case will have been thrown away if there has been brought prominently before your minds the possibility of a great many independent diseases occurring together in the same individual. It is not often that we meet with such an unusual array of morbid conditions as we have here; but the possibility of such a combination as phthisis, malignant disease, peritonitis, cirrhosis of the liver, and aneurismal dilatation of the aorta, should be borne in mind; and we should particularly learn from this case the lesson that it is not always the disease which occurs earliest, or which most obtrudes itself upon the physician's notice, that is most dangerous to life. Here it was neither the phthisis pulmonalis nor the developing aneurism which killed M——, but the cancer of the sigmoid flexure of the colon, which, by causing obstruction of the bowel, first endangered life, and, finally, by lighting up peritonitis, terminated it. It was, indeed, in this case, a race of diseases, for most certainly each of the other diseases present would sooner or later have proved fatal.

BEQUESTS, &c., TO MEDICAL CHARITIES.—The Greenock Infirmary has become entitled to £1000 under the will of Mr. Duncan Hoyle, and £100 under that of Miss Hunter. The West Herts Infirmary, Hemel Hempstead, has become entitled to £200 under the will of the Hon. Granville Dudley Ryder, of Westbrook Hay. The Royal Westminster Ophthalmic Hospital has received £100 under the will of Mr. James Fellows, of Old Quebec-street. Messrs. Joshua Tetley and Son have given £100 to the Leeds General Infirmary. The Rev. W. G. Humphry has given £50, being the first half of a donation of £100 towards the erection of the new Charing-cross Hospital Medical School building.

Lettsomian Lectures
ON
THE TREATMENT OF STRICTURE OF THE URETHRA, ENLARGED PROSTATE, AND STONE IN THE BLADDER,
WITH SPECIAL REFERENCE TO RECENT PROGRESS.

Delivered at the Medical Society of London, January, 1880.

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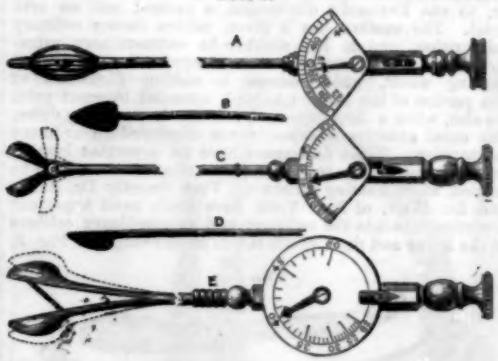
LECTURE I.

MR. PRESIDENT AND GENTLEMEN,—I desire to thank you very sincerely for the honour you have done me in appointing me your Lettsomian lecturer.

Before proceeding to the treatment of stricture, it will be necessary to inquire, "When may a man be said to have a stricture." The existence of stricture in its early stage is but little recognised here; and the answer to the question, whether gathered from students or books, would prove there was a general idea that if a No. 10 English catheter can be passed into a man's bladder, there can be no stricture. Inasmuch as the average calibre of the urethra is at least 10 mm. larger than that of a No. 10 Eng., and as every stricture must have a beginning, it follows that the calibre may be reduced from 28 mm. to 18 mm. (10 Eng.) without the stricture being recognised. Many years ago at this Society I defined a stricture to be "Any diminution of the normal calibre of the urethra, the result of the contraction of organised lymph." This gives an answer to the question, "When may a man be said to have a stricture?" If the calibre of a man's urethra is equal to No. 12 Eng. and only a No. 11 catheter can be introduced, I should say he has a stricture. Now in order to determine whether a certain condition be abnormal or not we must be acquainted with the normal state. All measurements taken in the dead-house are misleading, for they are made on a flabby strip of tissue, instead of on a tube surrounded by muscular fibres in a state of active life. Till recently the average diameter of the urinary canal had not been put at a higher figure than about 7 mm., giving only a calibre of about 21 mm. Not long ago the profession was startled by the investigations of Dr. Otis, and it was at once manifest on inquiry that the capacity of the urethra had been greatly under-estimated. When Dr. Otis was over here, he satisfied me, by actual examination, of the general accuracy of his measurements, and of the existence of a close relationship between the circumference of the penis and the calibre of the tube it contains. He also convinced me that we had been very illogical in regarding all men as possessing the same sized urethræ when treating them for stricture; for there can be no doubt that the urethræ of men differ in calibre, as much proportionately as do other parts of their bodies. It may now be safely asserted that the average calibre of the living male urethra is certainly not less than 28 mm.; also, that a catheter which may be quite large enough for one man may be much too small for another.

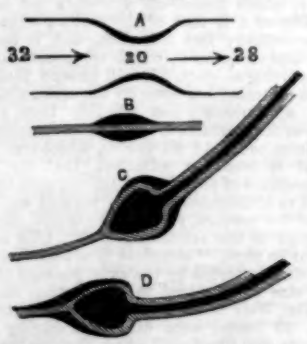
There are various instruments in use for exploring the urethra and detecting stricture, and for ascertaining the calibre of the canal. For the former purpose the "bougie à boule," originally invented by Sir Charles Bell, modified by Leroy d'Etiolles and Dr. Dick, is the most useful instrument. (See B, Fig. 1.) It has often been confounded by English writers with the "bougie olivaire," between which and the former there is as much difference as between a sound and a catheter, one being for diagnosis, the other for treatment. The "bougie à boule" is most useful for exploring the urethra to ascertain whether there be any stricture or not. It is especially valuable for detecting contractions in their incipient stage. A tight stricture is the work of years, and ought to be found out long before it has so diminished the calibre of the urethra as to interfere with micturition and attract the patient's notice. But if he has no trouble in urinating, why should he complain? He does not; but when he suffered from gleet he consulted somebody. Now, a gleet of more than six months' duration implies chronic inflammation, so that if an examination be

FIG. 1.



made, some induration will usually be found, indicated by a feeling of leatheriness, so different from the soft, velvety sensation conveyed by the "bougie à boule" when travelling down the urethra. The instrument detects tight strictures as it is passed down the canal (see D, Fig. 2), and those of large calibre as it is withdrawn. (See C, Fig. 2.) How can it detect a contraction which allows it to slip through without the slightest resistance being encountered? It must be remembered that the urethra is not an open tube like a gas-pipe, but a closed one. Let A, Fig. 2, represent a longitudinal section of the urethra when the

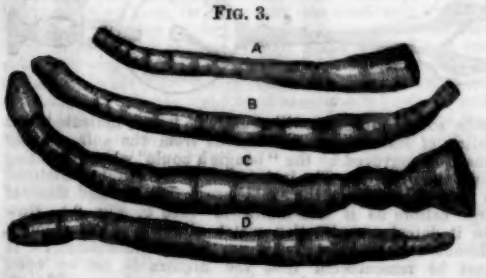
FIG. 2.



urine is passing through it. Let 20 mark the calibre of the strictured portion, 28 the calibre in front, and 32 the circumference of the dilated posterior portion. Now, when the urine is flowing the urethra will be closed as at B, the stricture will then be the indurated tissue marked black encircling the tube. When a bougie-à-boule with a head of calibre 18 (see C)—that is, two sizes smaller than the stricture—is introduced, it will slip through the stricture, as its tapering head permits it to do so, but on its withdrawal the base of the head, which is *travelling at right angles* to the axis of the urethra, will hitch against the strictured portion C, because every particle of the bougie is closely enveloped by the urethra. There is no such a thing as a vacuity in the canal, and whether urine, a calculus, or a bougie be passing down the urethra, each is intimately and accurately embraced by it. For hospital work the "bougie-à-boule" is invaluable and indispensable. D represents the "bougie-à-demi-boule," for diagnosing whether the stricture affects the side, floor, or roof of urethra. Not so, however, the endoscope. At one time I worked with it a great deal, and had the advantage of seeing its master, Desormeaux, use it, but I was disappointed with it. As Dr. Dick had pointed out, its revelations are often misleading,

for the introduction of the tube causes much irritation, and modifies the colouring. I am afraid it may be literally said of the endoscope, "Le jeu ne vaut pas la chandelle." With the urethrometer of Dr. Otis (A, Fig. 1) or Dr. Richardson's (C, Fig. 1), or that of Dr. Weir (E, Fig. 1), the normal character of the urethra can be ascertained. Now every mucous canal has two calibres—(1) an ordinary, (2) an extraordinary; or, to use Reybard's distinction, a natural and an artificial. The urethra has a given calibre during ordinary micturition, and it has another in extraordinary urination; as, for instance, when we compress the penis when making water, which causes a sudden distension of the portion of the urethra behind, attended by great pain. So also, when a large urethral calculus is travelling down, the canal exhibits a capacity not displayed in ordinary micturition. These differences have an important bearing on the question, as to what point dilatation ought to be carried when treating stricture. Very recently Dr. Sands and Dr. Weir, of New York, have made most important investigations into the ordinary and extraordinary calibres of the living and dead urethræ.[1] The drawings in Fig. 3,

FIG. 3.



reduced in size one-half, are taken from casts made of the urethra. C is from that of a healthy urethra in the deadhouse, when distended forcibly, and is seen to be much larger than B, which represents a urethra not so strongly distended. Figure A is that of the urethra when naturally expanded in ordinary free urination, and is considerably smaller than that of figure D, which represents forcible distension in the living subject. It will be seen that there are certain ridges or transverse lines on the casts, giving rise to a sacculated appearance; but whether they are normal constrictions or duplicatures of the mucous membrane cannot as yet be determined. At all events, whichever they may be considered it must be admitted that our heretofore relied-upon methods of exploration are not sufficiently trustworthy for us to distinguish between normal and abnormal narrowings of the urethra, certainly from No. 29 upward. An amendment to the statement of Dr. Otis is therefore demanded, for he says, "complete freedom from stricture can only be demonstrated by the easy passage of a bulbous sound, of a size fully equal to the normal calibre of the urethra."[2] Dr. Weir relates cases in which strictures admitting No. 30 bougie were diagnosed during life, but of which no traces could be found when the urethræ were laid open after death. He and others diagnosed strictures of large calibre on dead men. When the urethræ were examined no evidences of stricture could be found. It is very clear, therefore, that any diagnosis of the existence of strictures of a calibre larger than No. 29 must be received with great caution. The matter, however, need not trouble us in the least, for patients whose urethræ can take No. 29 can have no interference whatsoever with the act of urination.

It is well to bear in mind that in stricture we have not only *narrowing* of the canal, but *deviation* also, as shown by Jules Guérin and Mercier, and it is of the utmost importance to keep this in view when dealing with very tight or impassable strictures. To me stricture is one and indivisible. I know of no such condition as spasmodic or inflammatory stricture; it is an ephemeral phenomenon, and not an organic alteration. Dr. Gross and Dr. Otis hold the contrary, and the latter has recently written a paper on "Urethrismus," or chronic spasmodic urethral stricture, which, he states, simulates organic stricture in every respect. He maintains that many of the so-called deep contractions are, in reality, spasmodic, the result of reflex irritation, caused by the existence of organic strictures of large calibre in the penile urethra, and he holds that when they are divided the deep ones at once disappear. The deductions he draws is that no operation should be performed on a deep stricture until the anterior portion of the canal has been completely restored to its normal calibre. Dr. Otis' views are combated by Dr. Sands and others in New York. Much of the discrepancy may, I think, be explained when we reflect that a penile stricture is usually non-dilatable, whilst a deep one is generally amenable to dilatation. I exclude all cases of congenitally contracted meatus and orificial constrictions resulting from chancre. It is not fair to include such trifling conditions with the important and classical organic stricture, as much confusion is caused thereby. I divide strictures, physically considered, into the *ring* and *tunnel* varieties. I flatter myself these terms clearly and accurately convey what they are supposed to represent. The *sympathetic* symptoms caused by strictures are sometimes most extraordinary, and ought to be borne in mind. The curious case related by Sir Benjamin Brodie of a gentleman who suffered from pain in the instep, which was only relieved by passing a bougie through his stricture, is an instance in point.[3] The *obstructive* effects of stricture on the entire urinary apparatus behind it have been exhaustively investigated and described by Mr. Marcus Beck, and have an important bearing on operations.

Is stricture of the urethra *curable?* Practically it is, but not pathologically. We can usually make a patient as comfortable as ever he was, but this happy result is dependent on his regularly using the bougie for the rest of his life. Half a century has now rolled away since the great Delpech officially and dogmatically declared that stricture was incurable. He went so far as to say that any man who pretended to cure stricture was trifling with truth—"jouer avec la verité" was the strong expression he made use of.[4] It is the almost unanimous belief of French and English surgeons that stricture is not curable. These pessimist views of surgeons in the old world are not shared in by certain American surgeons. Dr. Otis, Dr. Gross, Dr. Pease, and Dr. Mastin hold that stricture is curable. Dr. Otis maintains that, if the stricture is completely divided and the urethra restored to its normal calibre, the deposit is absorbed and the patient cured. To prove his statement he has exhibited a few cases some time after operation in which no recontraction could be detected. At present I consider that the cases reported are too few in number, and the periods which have elapsed since the operations too short, to enable us to draw any deduction. To me such instances are wholly exceptional. Dr. Otis bases his views on Reybard's experiments proving that longitudinal wounds in the urethra are not followed by any contraction, so that if the stricture be divided completely, longitudinally, and the edges of the wound kept apart by the passage of a bougie during the healing process, a soft supple cicatrix will be formed which will not contract, and the patient be cured. In opposition to Dr. Otis' views, I would refer to the operation of external urethrotomy. In that procedure we can guarantee that Dr. Otis' conditions are thoroughly and completely fulfilled. Not only is the stricture divided, but the entire thickness of the urethra, together with some portions of the healthy canal above and below it. According to Dr. Otis there ought to be no recontraction; but the experience of all surgeons proves that there is if the bougie be not used regularly. Let me appeal to another operation—that of subcutaneous urethrotomy, which operation very closely resembles internal urethrotomy, only being more efficient and thorough in its execution, for in it everything between the staff and the skin is divided. According to Dr. Otis there ought to be no recontraction, and yet *there is.* I think these operations clearly show that the grounds upon which Dr. Otis bases his views are not tenable. Besides, the mere insertion of a "cicatricial splice" between the two divided ends of a stricture can in no way destroy the property of contraction which resided in it before operation: we simply have a larger stricture. There can be no doubt, however, that as the American surgeons go in for the insertion of a much larger "cicatricial splice" than we do, their results will be more enduring than ours; but I consider they have only postponed and not abolished the inevitable recontraction. I would here say how much I feel we are indebted to Dr.

[1] The Normal Urethra and its Constrictions, by Robt. Weir, M.D., p. 10.
[2] Op. cit., p. 18
[3] Lectures on certain Nervous Affections (1837), p. 38.
[4] Delpech, vol. i., p. 273.

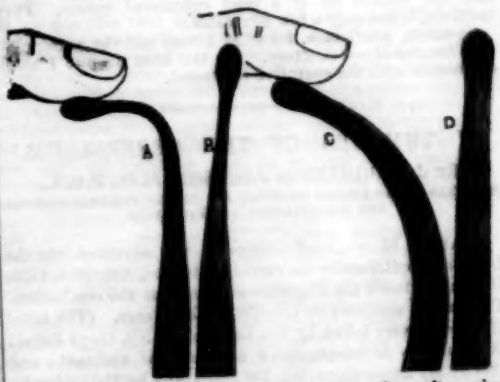
Otis. He has shown us that we had greatly under-estimated the calibre of the urethra, and what good results we shall obtain if we raise our standard in the treatment. Let us not forget that without Otis there probably would have been no Bigelow. Dr. Otis demonstrated what large instruments could be passed down the urethra, and Dr. Bigelow utilised the discovery for his new method of lithotrity.

All strictures range themselves into two great divisions, the *passable* and the *impassable*. The former usually are as easy of treatment as the latter are difficult. I do not think that this great difference has been sufficiently insisted on in their classification, and it would seem to be the tendency of all surgeons to occupy themselves more or less with the passable form of the complaint. The impassable stricture is always situated low down in the urethra, unless produced by traumatic causes. Fortunately for surgeons, although deep strictures are the most difficult to enter, they are the most amenable to dilatation. I will commence with the treatment of the passable variety.

There is, firstly, what may be called the "expectant" plan, which consists in confining a patient to bed and trusting to warmth, rest, and purging for an abatement of the trouble. This is not a desirable method, and has but few advocates. It entails a great sacrifice on the patient, and any amelioration effected rapidly vanishes when he resumes his ordinary methods of life.

Secondly, there is the treatment by gradual dilatation with instruments, allowing the patient to follow his occupation. There is a general consensus of opinion amongst surgeons all over the world that this is the best method of treating ordinary dilatable uncomplicated stricture. It is attended with no risk to life, and involves no sacrifice on the part of the patient. Certain American surgeons object to it, alleging that the treatment is merely palliative. Inasmuch, however, as I consider no more can be claimed for any other method, I hold that their objection is not founded on good grounds. With what kind of instruments ought the process to be carried out? We have soft and metal bougies, and each have their respective advocates, although I am glad to say the partisans of the cold steel are gradually diminishing in numbers every year, to the infinite benefit of mankind at large. If anyone has a doubt as to which is the better instrument to use, a soft or a metal one, let him one day pass a soft one on himself, and a few days afterwards introduce a metal one. We need not wait for an answer. Who has ever seen a man die after the passage of a soft French catheter? Are not cases on record in which patients have lost their lives from the mere introduction of a metal catheter, sound, or lithotrite? Who has ever seen a case of abscess and perineal fistula from the passage of an elastic olivary bougie? I have myself come across patients in whom abscess and fistula have followed the introduction of metal instruments by eminent surgeons. Are not rigors often seen after passing metal catheters, and are they not almost unknown after the use of soft ones? On every ground, therefore, let us use soft instruments. "La sonde rigide ne cede pas, l'obstacle cede devant elle." (Mercier.) But I have heard surgeons say, "Why, my patients actually prefer a metal bougie to a soft one." No doubt they do when the soft one is badly made. A viciously-shaped soft bougie is more annoying to the patient than a metal one. The latter may be steered into the bladder, but the former cannot. There are bougies and bougies, as illustrated in the accompanying woodcut. English bougies are badly adapted for the treatment of stricture, for, being cylindrical, they are blunt at the end, and cause the maximum amount of friction. The only use to which they can be put is to replace the dangerous wire stylets of metal catheters. In the French olivary bougie we have an instrument which gives rise to only a minimum amount of friction, and is admirably adapted for the purpose. It was invented by Lioutt at the commencement of the present century, and was formed by placing an olive on the end of a conical bougie. Its tapering flexible extremity enables it to adapt itself to the windings of the urethra, and the olive tip prevents it from lodging in the lacunæ or false passages. A well-made French olivary bougie has a thin long neck and a well-developed head, whereas the so-called French bougie made in England has usually a thick neck and badly-shaped olive, which, as Van Buren has pointed out, renders the instrument useless for treatment. The "bougies olivaires" delineated in Fig. 4 represent respectively the good and the bad. B is a well-made bougie, and its extremity can be bent at right angles to its shaft, as seen at A. Directly the finger is removed the instrument regains its former position, B. Not so, however, the badly-shaped bougie, D, whose extremity cannot be bent at right angles to its shaft, but assumes the position represented at C if the finger presses down its tip. Most cases of passable stricture can be gradually and efficiently dilated with olivary bougies; but every now and

FIG. 4.



then when there is a long tunnel stricture, the soft conical bougie will be the best to deal with it. Either of the instruments can be strengthened by inserting stylets of lead, as seen in the "bougie-à-plomb" of the French. Bougies filled with small shot, as used in Paris, glide into the bladder almost by their own weight. Although I am a strong advocate for soft instruments, I recognise that metal ones have their uses. In connexion with the subject I would remark that the English gauge ought to be abolished. Its transitions in size are abrupt and meaningless. If a No. 10 Eng. is passed one day, and a No. 12 Eng. the next, what does it signify? Nothing beyond the fact that a larger instrument has been introduced, but how much larger cannot be said. Gradual dilatation, when carried out by the English gauge, often fails on account of the abrupt transition in the size of the bougies used. In the French gauge the transitions are very gradual, and are mathematically exact. If No. 18 be passed, and after it No. 19, it is known that one millimetre in circumference has been gained.

Thirdly, there is the method of continuous dilatation, which is most useful when the former plan has failed, or where a patient cannot afford the length of time requisite for gradual dilatation. It, however, sometimes fails on account of the irritation set up by the retention of an instrument, and occasionally it is impotent to effect the desired object. Mercier has shown that perforation of the bladder may be caused by tying in a catheter, and he points out that a cylindrical instrument, having its eye close to the end, ought to be used, the eye being made to correspond with the meatus internus, so that the catheter does not project into the bladder. Mr. Furneaux Jordan and I have shown that tight strictures can be well treated simply by tying in a filiform bougie; the urine runs by its side and dilates the stricture.

There is, fourthly, the method of sliding one instrument over the other, chiefly known here as "Wakley's." It is very useful in certain cases where there are false passages; for when once the guide has been passed tubes increasing in size can easily be slid over it.

There is, fifthly, cauterisation. At one time it was extensively used in this country, but it has been almost completely abandoned. The experiments of Reyhard demonstrated that it was a most objectionable method on account of the character of the cicatrix which resulted. Now, although I do not think it eligible for passable strictures, still I have seen it useful in cases of impassable stricture, where the opening was placed very eccentrically; and it was employed not for the purpose of enlarging the stricture by causing ulceration, but simply to open up the mouth of the contraction, to enable a bougie to be introduced.

Sixthly, electrolysis. Mallez and Tripier were the first to employ it in the treatment of stricture. They were followed by Newman, of New York; all of them, however, merely using it to cause absorption. Dr. Van Buren says it has been tried and found wanting. It appears to me to possess

one great disadvantage, and that is the long period of four weeks which must elapse between each introduction. I had some time ago a patient under my care who had a perineal abscess and fistula caused by its application in America.

There is, seventhly, the method of over-distending the stricture by introducing an instrument with two blades, which can be expanded. It is very painful on application, and the results are of a most ephemeral nature. Fortunately, it has only a few advocates.

So much, gentlemen, for what I may call the manipulative treatment of stricture. At the next lecture I shall commence with the operative treatment.

ON TUMOURS OF THE CEREBELLUM.[1]

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CHARLES M——, aged thirty-five, was admitted into the London Hospital under the care of Dr. Sutton, Aug. 30th, 1879. Dr. Sutton made the diagnosis of disease of the cerebellum. The patient was later on transferred to my care. (The notes of the case were taken by Mr. Lawton and Mr. Lloyd Jones; Dr. Sutton's house-physician and medical assistant; and also by my house-physician, Dr. Jones, and by Mr. Richards, medical assistant.)

The patient was a healthy-looking man, and had had, except for rheumatic fever, a healthy life until the fatal illness. The duration of the illness altogether was from about January, 1879, but at first there was only a complaint of stiffness of the neck. The marked symptoms were of about three months' duration. He was at his work as a law writer until his admission, Aug. 30th, 1879.

The first thing he noticed beyond mere slight stiffness was that when writing his neck would become suddenly stiff and painful at the nape, preventing his bending his head over to the desk. The attacks came on irregularly, and at first he ascribed them to excitement, caused by having to control what he called the "drunken set" he had to overlook. The attacks of neck pains and stiffness generally began with a throbbing pain in front of his throat, and this pain, as he expressed it, "flew backwards, drawing his head back." Sometimes for a day his head would be drawn a little back, [illegible] further back in paroxysms. He slept well, having no paroxysms at night. About a month before his admission he felt his feet tottering when he got up to walk, but he walked well when fairly started. About fourteen days before admission his eyesight became dim. On admission, Aug. 30th, patient had pain in the back of the head. He had double optic neuritis with impaired vision. His other special senses were normal. He had occasional vomiting. His head was constantly drawn back, and occasionally he had paroxysms of greater drawing back, each lasting two or three minutes. On one occasion, to relieve himself, he lay on his belly, with his chin resting on the pillow. Sometimes the occiput would touch the spine, and in the earlier notes of his attacks his body is said to be drawn back, and that he is in a state of opisthotonos. On Sept. 25th he had an attack of greater range, in which there was twitching of the limbs with greater retraction of the head and opisthotonos; there was also some nystagmus, the exact nature of which is not mentioned.

He was transferred later on to my care. On Oct. 6th I saw him. His head was then drawn back, but at my examination he was not in a paroxysm. When got out of bed he could walk, but reeled very slightly. When sitting, his legs acted strongly whilst endeavouring to overcome our resistance to flexion, extension, and to raising his knees. His arms were not affected. Patellar tendon-reflex was normal.

He continued subject to the paroxysms. On Oct. 11th he had paroxysms nearly all day long. A diagrammatic sketch was taken of the patient in one of them by Dr. Stephen Mackenzie whilst the patient was standing. It was of necessity taken rapidly. I noticed spasm of no other parts than of the muscles of the spine, and in particular that the masseters were not engaged. Possibly part of the incurvation of the back was compensatory. To my astonishment the patient died the same day.

There was found, post mortem, a tumour about the size of a walnut in the inner part of the left lobe of the cerebellum reaching up to the middle lobe. It was a sarcoma, cystic in its interior. The symptoms may be put in two classes.

1. *Those which pointed simply to the existence of local gross organic disease of some kind.*

2. *Symptoms which localise*—(*a*) retraction of the head; (*b*) paroxysms of increased retraction; (*c*) an unsteadiness of gait.

Before considering either set of symptoms, it may be remarked that tumour or abscess of part of the cerebellum may exist without any marked symptoms. This may be affirmed of the cerebrum also. A patient may for a long time have symptoms so slight that he takes no notice of them, when suddenly he has a convulsive seizure, or becomes apoplectic, or dies suddenly; after death we find abscess or tumour of the cerebrum or cerebellum. In the case of tumour we find occasionally hæmorrhage from that tumour. Or a patient is under our care for some non-cerebral ailment, and we find tumour or abscess post mortem, although the existence of any kind of intracranial disease was never suspected during the patient's life.

1. *Symptoms pointing only to gross organic disease of some kind within the cranium.*—(*a*) Double optic neuritis was found on the patient's admission. His sight began to fail about fourteen days before admission, but no doubt his discs were abnormal before that time. It is well known that very strikingly abnormal ophthalmoscopical appearances may exist before the sight becomes defective, and that neuritis may pass away, probably always leaving some relics, without leaving defect of sight. Optic neuritis is of no value in localising disease in any part of the cerebrum or cerebellum. It has been said that tumour of the cerebellum, of the middle lobe especially, produces blindness by pressure on the corpora quadrigemina. Admitting that this may be so, it remains that in all cases I have yet seen, or heard of, of defect of sight with cerebellar tumour, there has been optic neuritis, and thus the defect of sight may be accounted for in another way than by the pressure hypothesis. In one case of tumour of the middle lobe there was optic neuritis when the patient's sight (a child) was such that he could see a hair on his pillow. As a matter of fact, a defect of sight from intracranial tumour is not caused in the majority of cases because the tumour involves any known part of the optic nervous system (corpora quadrigemina, optic tracts, or optic nerves); it is, therefore, in most cases not caused by destruction of any part of the cerebrum or cerebellum. (It may be that symmetrical disease of Ferrier's centres of vision produces defect of sight). Optic neuritis results in an indirect way. By some unknown process the tumour (or other adventitious product) leads to changes in the optic nerves, on which blindness may or *may not* follow. Again, in some cases of even large intracranial tumour, there is no optic neuritis. It may come on years after the first symptom of intracranial tumour. (*b*) Headache. Probably the pain at the back of the head was partly soreness, the result of dragging by the retracting muscles. There appears to have been no excessive pain. Pain at the back of the head is not to be trusted for the diagnosis of cerebellar tumour. (*c*) Vomiting is not a symptom peculiar to cerebellar tumour. Probably it depends rather on acuteness of process than on the position of the tumour.

To resume. The three symptoms mentioned are of no value in localisation. They are not decisive evidence of local gross organic disease; such disease may exist without them. They are, nevertheless, the best evidence of gross organic disease (renal disease being excluded).

2. *Localising symptoms.*—As aforesaid, there may be no marked symptoms in cases of cerebellar tumour or cerebellar abscess. I have seen a tumour in each lateral lobe of the cerebellum in a man who, fourteen days before death, had no motor symptom except paralysis of one arm, which was accounted for by tumour of the hinder part of the uppermost frontal convolution. Beyond question, whether we have motor symptoms or not depends on the size of the tumour, on the rapidity of its growth, on the softening it produces, and, of course, on the exact position of the tumour.

[1] Read before the Medical Society of London, Jan. 12th, 1880.

Then we have to bear in mind that, during the last part of the illness, in most cases, the patient is obliged, by pain and misery, to keep his bed, and testing his locomotion is not possible. (Tumour under the tentorium probably produces more disturbance by pressure than cerebral tumours do.) I think Nothnagel is right in his opinion that disease of the middle lobe is more likely to be attended by reeling than disease of the lateral lobe. Reeling is the earliest motor symptom from cerebellar disease.

It may be well here to speak of the several motor symptoms found in some cases of cerebellar tumour.

There are three motor symptoms which may occur with tumour of the cerebellum; they have their analogues in cerebral disease. (*a*) Reeling. (*b*) A certain persisting rigidity. (*c*) Tetanus-like paroxysms. Reeling, I think, is, or at least depends on, a cerebellar paralysis, the analogue of the hemiplegia a cerebral paralysis; persistent rigidity is the analogue of the well-known rigidity in hemiplegia and the tetanus-like seizures of unilaterally beginning convulsive seizures from cerebral cortical disease. (After some unilaterally beginning convulsion there is temporary paralysis of the parts first and most convulsed. I have yet no facts as to anything analogous in cerebellar disease.)

(*a*) Reeling is the earliest motor symptom. It is not the gait of locomotor ataxy, nor that of paraplegia. It is like the walk of a drunken man. It occurs in some cases of ear disease—often acutely in paroxysms (Menière's disease), or sometimes chronically. It is essentially a swaying of the trunk from back to front and from side to side. It is masked in some slight cases by the patient's walking with his legs apart; by this means small inclinations of the trunk are neutralised. The gait is worse when he walks with closed eyes. In early stages, in slight reels, I believe the real fault is paresis of movements of the spine answering to the swayings of the trunk. The legs act erratically, but in an early stage they are blameless; they act erratically because they have to "run after" the trunk, to prop it up in its various over-inclinings. The legs, often blamed, are really doing more than their duty. In cases of paralysis of the extensors of the feet the patient lifts his legs highly. To a layman his defect would appear to be that of lifting the legs highly. But this movement is "necessitated" by the paralysis of the extensors. To blame the legs in an early stage of cerebellar reel would be like blaming the leg-lifting movement in paralysis of the extensors of the feet. If the true fault in cerebellar reeling be paresis of the movements for bracing up the spine, we see that the reel compares with hemiplegia; the essential fault in the reel is a partial paralysis.

I suppose no one nowadays would confess to a belief in a *faculty* of co-ordination, nor to a belief in a co-ordinating centre, but that all consider every nervous centre, whether spinal, cerebellar, cerebral, or sympathetic, to be a centre of co-ordination, and that only in the sense of its being a part where these or those impressions and movements are *represented* in this or that degree and order. So those who hold that the cerebellum is the centre for the most special and complex co-ordinations of locomotor movements mean that it is a centre where the most special and complex of these movements are represented. This is only another way of saying that the cerebellum represents especially those movements which are bilateral or alternate. If we take count of all kinds of locomotion (and, indeed, of equilibration, whether statical, as in standing, or continually changing, as in progression) we see that the usual statement as to the chief functions of the cerebellum is equivalent to saying that it represents movements of all parts of the body. We must not use the term locomotion for walking only. In swift running the body is bent forwards, the jaws and face are in action, the arms swing, and professional runners carry cork in their hands to prevent the nails hurting the palms. We have to study all degrees of locomotion, from getting up to swift running, with the aim of ascertaining *the order* in which movements of different parts of the body are represented in the cerebellum. We see, I think, that muscles first in action are the spinal; they get into very strong action in swift running; the body would fall forwards if not held up. The reel is, I think, owing to paresis of movements of the spinal column. If so, the true morbid condition in the reel compares with hemiplegia and not with chorea, the movements of which, even on a very superficial glance, differ *toto cœlo*. If we look at the choreal limbs and at the legs in the reeling man we may properly say that they are both disorders of co-ordination, but in the former case the movements occur at any time (from increased cerebral discharges) in the latter only when the patient is trying to move, and then they are "necessitated" over-movement to compensate for the loss of other (spinal) movements. A truer analogue of the cerebellar reel is the tremor of disseminated sclerosis in which there is also paralysis. (Judging by the analogy of other cases, the condition will be more complex than this. From energising of the diseased centre there will probably be underdoing of some and overdoing of other spinal movements.)

It is quite true that in cases of complete paralysis, with atrophy, of some of the spinal muscles, say the erectores spinæ, we have no such reel as in cerebellar disease. But the cases are different. A lesion of the anterior horns of the spinal cord destroys the action of some muscles altogether; this is a very different thing from loss of some complex movements of the spinal column. Again, in the paralysis, with atrophy, of some muscles, the patient walks by "dodging" the paralysis (just as we see other patients "dodge" the effects of paralysis of an external rectus); even then he walks badly, has a veritable inco-ordination of locomotion, although not one so complete as a reel.

(*b*) *Cerebellar rigidity.*—Just as rigidity ensues in some cases of cerebral paralysis (hemiplegia), so it does in some cases of cerebellar paralysis. In the latter the spinal muscles first become rigid, drawing back the head and curving the spine; ultimately the legs and arms are rigid. This universal rigidity, as a condition arising from cerebellar tumour, I have seen only when the tumour has been of the middle lobe. I may here say that I am indebted to Dr. Stephen Mackenzie for the drawings I send round, and also for most valuable help in the investigation of cases of cerebellar disease. In cases of hemiplegia the rigidity is contemporaneous with the ensuing of Wallerian wasting in the spinal cord. Whether there is a "descending" wasting in cerebellar rigidity I do not know. Cerebellar rigidity differs from the rigidity of paralysis agitans; in the latter the body is bent forwards, in the former backwards.

(*c*) *Tetanus-like seizures.*—Besides rigidity we find, in some cases of tumour of the middle lobe, attacks very like, if not quite like, those of ordinary surgical tetanus. I pass round drawings by Dr. Stephen Mackenzie, to whom again I gratefully acknowledge my indebtedness for help in the investigation of cerebellar disease.

I have only once seen seizures like tetanus in a case of local cerebral disease, and in that case they occurred during the last hours of life, during dying. Dr. Gowers discovered no cerebellar lesion; there was large cerebral tumour corresponding to hemiplegia. In the case of extensive rigidity and tetanus-like seizures, the tumour has been of the middle lobe, and has been large. I suppose the cerebellar rigidity to be owing to unantagonised cerebral influx (rigidity in hemiplegia being owing to unantagonised cerebellar influx), and the tetanus-like seizures to be owing to cerebellar discharges analogous to those cerebral discharges which produce unilaterally beginning (epileptiform) convulsions. But there is the obvious objection that the two symptoms, with the cerebellar disease, may be owing to interference with the corpora quadrigemina (electrical excitation of which Ferrier finds produces tetanus-like states), or to interference with the medulla oblongata.

Hitzig and Ferrier have convinced most people that some parts of the cerebral cortex represent movements, and Charcot, by a very different kind of evidence, clinical and pathological, has confirmed their opinions. I have long wished to ascertain if the cerebellum cannot be broken up into regions, each representing especially some movements of the body. In this case, the subject of this paper, there was a very local movement, a local tetanus. That the drawing back of the head in paroxysm was owing to discharge of some part where the movements for drawing back or supporting the head are represented is a truism; but I do not draw the inference that it was the part in which the tumour lay, for, besides objections already stated, I have but one case. If the discharge *were* of the cerebellum, it may have been of some part of the middle lobe. Of course the discharge would be of *nerve-cells* rendered highly unstable by action of the tumour, and it does not follow that the *nearest* cells would soonest become unstable; probably small cells become unstable before large ones. Another important thing is that one would suppose the movements of drawing back or supporting the head to have a wide representation, and we could, I think, only expect to find some part of the cerebellum, on each side doubtless, where movements of the head are *chiefly* represented. There are clinical difficulties,

drawing back of the head occurs in cases of meningitis; but plainly, the best cases for investigation of regional localisation are cases of small tumour producing a chronic illness.

Occasionally we meet with other local tonic spasms, sometimes of the jaws. Of the pathology of these cases I know nothing at all. I would suggest that the cerebellum should be carefully searched as well as other parts in all cases of local tonic spasm, including ordinary torticollis.

I think there is evidence that in some parts of the cerebellum there is a unilateral representation in the order from trunk movements to movements of the hands and feet. I have no doubt that Brown-Séquard is right in saying that tumour pressing on the crus cerebelli produces paralysis of the same side, and I believe this is mainly of movements of the trunk and those passing to the upper parts of the limbs. The erratic movements of the arm in some of these cases partly depend, I think, on paresis of muscles attaching the limb to the trunk.

There are indirect symptoms from tumour of the middle lobe and large tumours under the tentorium. There is vast increase of fluid in the lateral ventricles of the cerebrum in some cases. In children the head enlarges; there is great hebetude of mind, a slow failure of mental faculties. This I used to suppose was caused by pressure, as the veins of Galen. Stephen Mackenzie, in an admirable paper on Cerebellar Disease, recently read before the Hunterian Society, suggests another explanation.

A MODIFIED CLOVER'S BOTTLE FOR THE RAPID EXTRACTION OF DEBRIS AFTER LITHOTRITY.

BY BERKELEY HILL,

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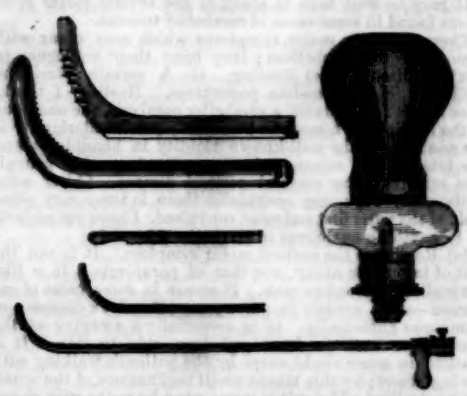
DR. BIGELOW'S bottle and tubes for exhausting débris after lithotrity are manifestly a great improvement on the apparatus previously employed for that purpose. The improvement consists, first, in providing a wider passage for the current to and fro between the bladder and the exhausting bottle; and, secondly, in furnishing a more forcible stream than was possible with the small bottle of Clover. But as Bigelow's bottle has considerable disadvantages in being costly, cumbersome, and especially in being much longer than is necessary, it occurred to me that Clover's bottle might, by some small modifications, be rendered a more rapid exhauster of débris than that of Bigelow. For some time before Dr. Bigelow's visit to this country I had been employing urethral tubes for washing out débris larger than those commonly used for this purpose, habitually employing Nos. 24 and 26 French, instead of No. 22 or No. 23 (Nos. 12 and 13 English), the customary sizes. Consequently, when Dr. Bigelow brought before the profession his rapid method of clearing the bladder of débris, I was prepared to appreciate the improvement he has effected in this department of surgery. By the apparatus which I have now used on several occasions—the outcome of repeated alterations—I find I can exhaust a given quantity of débris more rapidly than I can by Bigelow's bottle. This advantage I attribute mainly to the shorter distance the fragments have to travel from the neck of the bladder before they are securely lodged in the trap below the current. The length of the tube from the beak to the interior of the receiver is only eleven inches, or twenty inches less than that in Bigelow's apparatus.

The woodcut shows the form of the apparatus very well. A stout india-rubber bottle, holding ten ounces, with a neck one inch across internally, is fitted to a glass receiver, or trap, blown into a discoid shape resembling that of a flat turnip or onion, having a transverse diameter of 3½ in. The mount of this receiver is closed by a cap, to which the washing-out catheters can be fitted in a joint fastened by a bayonet-catch. The catheter is prolonged into the centre of the receiver by a short tube, ¼ in. (about No. 40 French) in diameter, to prevent the reflux of the fragments that have already been sucked out of the bladder. As the fragments issue from the tube they at first swirl about in the receiver, then fall rapidly into the lower part, where they lie snug and still while the water is being injected again into the bladder to bring forth another quantity of débris. Probably the main advantage of the apparatus is its shortness. A moment's reflection will show that when the outflow ceases part of the débris sucked from the bladder lies in the tube, to be driven into the bladder again by the next inflow of water; consequently the nearer the trap or receiver can be



placed to the neck of the bladder, the more rapid will be the removal of the fragments. In Bigelow's apparatus, the receiver is placed at the farthest extremity of the bottle. This large bottle is placed for convenience of working at the end of 14 in. of flexible tube. Thus the fragments have to travel 11½ in. along the silver tube, then along 14½ in. of flexible tube, making a total distance of 26 in., before they reach the bottle itself, down which they gravitate during the pauses between each act of injecting and exhausting to the glass receiver placed at the further end of the bottle. Thus the fragments do not reach the trap or resting-place, until they have traversed 31 in. of distance. The tubes I use have an internal capacity equal to sounds Nos. 24, 26, and 30 French (equal to Nos. 14, 16, and 18 English). They are provided with large eyes, carefully bevelled off to prevent their gaping edges from lacerating the mucous membrane. Some have the eye placed at the convexity of the beak, some have it at the concavity, and one tube (the largest) is straight throughout. This I have seldom used, as it is rare for the urethra to admit its introduction without a preliminary free incision of the meatus urinarius, which it is not always expedient to do. Except in being shorter, and in the lesser sizes smaller, my tubes do not greatly differ from Bigelow's, and their mode of attachment to the washing-bottle is copied from Bigelow's pattern.

The woodcut also shows the beaks of a powerful lithotrite made for me by Mr. Coxeter, for breaking large hard stone that cannot be safely managed by ordinary lithotrites. It was constructed for me in imitation of Sir Henry Thompson's new lithotrite, and in some respect, like other imitations, advances beyond the first embodiment of the new idea. His recent alterations on former patterns Sir Henry Thompson has already brought before the profession in this country, and on the continent. They are chiefly two. First, the male blade is fitted to slide along the female blade until its heel comes flush with the outer surface of the beak of the female blade, which is cut away for that purpose. By this arrangement fragments cannot lodge nor lock the blades, but are driven through the female blade before the advancing male blade. The second novel point is, the knife edge form given to the beak of the male blade. This knife edge enables the male blade to penetrate a hard, bulky stone with facility, and split it into fragments, that can afterwards be readily comminuted by the usual lithotrites, which have more pulverising action. The beaks of the lithotrite depicted in the drawing differ from those of Sir Henry Thompson's instruments in having a somewhat sharper knife-edge and a wider notching of the edge; there is also a slight jagging of the opposing edges of the female blade to afford a better hold of the stone before it is broken. Whether this increased sharpness of the knife-edge is an additional advantage can only be determined by comparative trial of the two instruments. Mine was simply an endeavour

on the part of Mr. Coxeter to produce a lithotrite for me that should embody Sir Henry Thompson's recent improvements, of the value of which there can be no doubt. Both Sir Henry Thompson's lithotrite and the repetition shown in the drawings, while being sufficiently powerful to deal with the hardest stones, are far less bulky and heavy than Bigelow's large lithotrite. This power is attained by better mechanical concentration of the crushing force.

Wimpole-street.

ON THE TREATMENT OF DIPHTHERITIC OPHTHALMIA BY LOCAL APPLICATIONS OF SOLUTION OF QUININE.

BY JOHN TWEEDY, F.R.C.S. ENG.,
ASSISTANT-SURGEON AT THE ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.

TRUE diphtheritic ophthalmia is so rare in this country, and its treatment at all times and in all places so unsatisfactory, that no apology is, I hope, needed for the following remarks.

Until the beginning of last year I had, out of an aggregate of many thousand cases of disease of the eye, seen but one unmistakable example of primary diphtheritic ophthalmia, and that was in the year 1873. In February, 1876, I was consulted about a case of ophthalmia in an infant, which I suspected to be diphtheritic, but was deterred from treating it as such in consequence of overwhelming evidence of its gonorrhœal origin. More than three years and a half after—namely, in October, 1879—I accidentally alighted on some knowledge that tended to strengthen my suspicion, and has indeed convinced me that, whatever may have been its origin, the case was really diphtheritic when I saw it. These were the only cases I had ever seen, either in my own practice or in that of others, prior to those hereinafter described.

I deem it necessary to make this explanation, because many cases have been recorded in the medical newspapers and other periodicals of this country, under the name of diphtheritic ophthalmia, which, in my opinion, were not diphtheritic at all, but merely cases of purulent ophthalmia, accompanied with the formation of pellicular membranes on the surface of the conjunctiva. If the confusion only involved a question of nomenclature, it would scarcely be necessary to do more than call attention to it in passing; but there is a more important issue at stake. It unfortunately happens that the treatment that is appropriate for the membranous form of purulent ophthalmia is, according to the best authorities, highly injurious in the diphtheritic variety. Hence the danger that lurks in the hypothesis that membranous ophthalmia and diphtheritic ophthalmia are different phases of the same disease. If the caustic treatment, which is uniformly successful in the former disease, be adopted in the latter, disastrous results will ensue. I cannot perhaps cite a better illustration of the sort of case that has been recorded by British practitioners as diphtheritic ophthalmia than that reported in THE LANCET "Mirror of Hospital Practice" for July 5th, 1873, as occurring in the practice of Mr. Streatfeild at Moorfields. This particular illustration is especially apposite, because there is a long editorial comment pointing out the essential difference between the case in question and those described by von Graefe and other continental writers under the same name.[1] A like criticism would apply to almost all the other cases that have been recorded in this country.

My late lamented friend and colleague, Mr. Soelberg Wells, who, while acting as assistant to Professor von Graefe, in Berlin, had many opportunities of witnessing the disease, used to say that he had never seen a genuine example of diphtheritic ophthalmia in this country. I regret that he was unable to inspect any of those I am about to relate until they were nearly cured. It is, however, as I have already hinted, a mistake to imagine that the malady never occurs in this country. At the fourth International Ophthalmological Congress, held in London in 1872, Dr. Samelson, of Manchester, read a paper on some cases of diphtheritic ophthalmia that occurred in that city during the years from 1867 to 1871. Dr. Samelson was careful to explain that by the term "diphtheritic ophthalmia" he did not mean "the so-called membranous conjunctivitis as characterised by the formation of a pellicular membrane and easily removable recurrent exudation on the surface of a mostly highly vascular mucosa," but "that specific affection of the eye for the life-like delineation of which we are indebted to von Graefe, and the chief pathognomonic feature of which is the thorough solid infiltration of the parenchyma of the mucous membrane, so almost hopelessly unmanageable, and so prone to destruction."[2]

This is precisely the criterion by which all cases should be judged. Keeping these characteristics in mind, anyone who will take the trouble to read the descriptions of the so-called cases of diphtheritic ophthalmia recorded as occurring in this country, will find that, almost without exception, they fall into the former category, and that neither in severity nor gravity did they resemble the true form. The cases I shall relate fulfil, I think, the conditions laid down by Dr. Samelson.

On the 15th of February last a puny male child, four months old, was shown to me at the hospital, suffering apparently from a moderate attack of purulent ophthalmia of both eyes. The lids were red and swollen, but soft and easily evertible. A thin purulent discharge exuded from the palpebral fissures, and the conjunctival sacs contained a considerable quantity of the ordinary yellow muco-pus that is secreted in purulent conjunctivitis of children. The palpebral conjunctiva of both eyes was of a bright-red colour, vascular, prominent, and spongy. Both corneæ were smooth, bright, and clear. The mother, a small, delicate, and ill-nourished woman, stated that she first noticed the discharge three days before, and that the child, who was breast-fed, had not previously had anything amiss with the eyes.

The case was treated as one of simple purulent ophthalmia. The conjunctival sacs were gently but thoroughly cleansed with tepid water, and the surface of the mucous membranes was lightly brushed with a ten-grain solution of nitrate of silver, and a lotion containing six grains of alum to an ounce of water was given to the mother to use every three hours. When seen by Mr. Burnham, the junior house-surgeon, on the following morning, the eyes seemed better; although the swelling had in no degree abated, the discharge was diminished in quantity, thinner in consistence, and less purulent in character. On the 17th the case was apparently doing satisfactorily; the lids were again lightly brushed with a five-grain solution of nitrate of silver.

The child was not seen on the 18th, but on the morning of the 19th I saw it myself, and was startled to find a marked change for the worse. The lids were more swollen, and they had become hot, hard, and shining, and of a reddish-purple hue. A thin, dirty-looking fluid, mingled with greyish flakes and shreds, escaped from the deep, narrow chink between the upper and lower eyelids. The lids could hardly be separated, and when they were everted the palpebral conjunctivæ of both eyes were found no longer red and spongy, but pale, smooth, thick, and mottled with red and grey, the grey vastly predominating. Many small ecchymoses were scattered over the surface, and here and there were larger or smaller bloodvessels, blocked with stagnant blood. The mottled patches of exudation had an irregular and an ill-defined margin, and extended laterally along the whole length of the lids from inner to outer angle, and antero-posteriorly from the free margin, where they were most pronounced, to the oculo-palpebral fold, where they seemed to gradually fade away. They began again near the periphery of the ocular conjunctiva, and continued up to the corneal limbus. To the touch, and when compressed edgeways between the thumb and finger, the conjunctiva felt hard and resistent. In both eyes the upper lids were the more affected.

Moderate friction with lint failed to remove more than a few insignificant shreds, and left the appearance substantially unaltered; nor could fairly energetic friction detach the false membrane, which seemed to sink deeply into the conjunctival tissue. Even the forceps failed to strip it off, or to provoke bleeding. Both corneæ were rough and steamy, and had lost their transparency to such a degree that neither the iris nor the pupil could be traced. On the right cornea there was, in addition to the general haziness, a well-

[1] THE LANCET, vol. ii. 1873, p. 10.

[2] Report of the Fourth International Ophthalmological Congress, held in London, August, 1872, p. 127. London, 1873.

marked, greyish-yellow concentric crescent, about one-sixth of an inch in length, midway between the centre and the outer margin.

I did not hesitate to pronounce the case to be one of genuine primary diphtheritic ophthalmia, and I, not unwilling, accepted the opportunity of putting to the test a plan of treatment that had some years before suggested itself to me as suitable in such cases. The treatment that had been previously prescribed was at once countermanded, and a lotion was ordered containing three grains of sulphate of quinine with a minimum quantity of diluted sulphuric acid to the ounce. Although the mother was informed that there was too much reason to fear that the eyes were lost, she was enjoined to keep compresses, well saturated with the lotion, constantly applied over the eyelids, and to wash out the conjunctival sacs freely at least every two hours with the lotion.

These instructions were carried out with praiseworthy assiduity and zeal, and at the end of forty-eight hours the eyes were not only not worse, but appreciably better, the improvement being more noticeable on the left side. On the 22nd the lids were neither so hard nor so hot, and they were less swollen. The corneæ were recovering their translucency and smoothness, and the false membranes on the conjunctivæ were considerably reduced both in extent and in depth. Three days later the conjunctivæ were almost wholly free from false membrane; both corneæ were clear and transparent, and no trace of the crescentic patch on the right cornea could be discovered, even with a strong magnifying glass. The palpebral conjunctivæ had again become red, vascular, and spongy. They had not, however, the ordinary villous appearance, but were coarsely wormeaten. The discharge was once more thick and purulent. The compresses were omitted, but the lotion was continued every three hours.

On the 3rd of March a weak alum lotion was ordered to be used three times a day, in addition to occasional applications of the quinine lotion. A week later there was scarcely any discharge, and the wormeaten irregularities of the conjunctivæ were disappearing, and some of them were closing by very fine cicatrices. About the middle of the month of March the quinine and alum lotions were replaced by a weak perchloride of mercury lotion, one-tenth of a grain to an ounce, which was to be used twice a day.

The child was seen at intervals of two or three weeks until the beginning of May. When last seen there was no discharge; the corneæ were bright, clear, and perfectly transparent; the palpebral conjunctivæ were smooth, but presented a delicate network of minute cicatricial bands. All treatment was stopped, and the case dismissed cured.

There can, I think, be no reasonable doubt that the case was identical with those described by Graefe[3] and others under the name of diphtheritic conjunctivitis. The three classical stages were well marked both as regards sequence and intensity. In addition to the early purulent stage, which may or may not have been essential, there were the exudative or pseudo-membraneous stage, the exfoliative and suppurative stage, and, lastly, the stage of cicatrisation. This peculiar sequence of phenomena separates the case from membranous conjunctivitis, which is, as I have already stated, merely a complication of ordinary purulent ophthalmia. Indeed, the two diseases seem to me as dissimilar in their anatomical and pathological nature as in their clinical aspects. In the membranous form there is a greyish pellicle *on the surface* of the conjunctiva, whereas in the diphtheritic the pseudo-membrane is embedded, sometimes deeply, *in the substance* of the mucous membrane. The pellicle in the membranous form may without much difficulty be stripped off entire, or in large shreds, exposing a red, spongy surface, which readily bleeds; but the pseudo-membrane of the diphtheritic form can neither be rubbed nor stripped off; at best it may be picked off in tiny bits with forceps, and then the underlying tissue is usually pale, and does not yield fluid blood. Again, the pellicular membrane involves only the epithelium of the conjunctiva, and does not effect any permanent change in the structure of the mucous membrane, whereas the exudation of diphtheria produces molecular disintegration of the parenchyma, which can only be repaired by cicatrisation. These anatomical differences are, I believe, constant. There is yet another particular in which the two diseases are unlike, and that is is in their behaviour to treatment. Those who have had most experience in treating unequivocal cases of diphtheritic ophthalmia agree that caustics do harm, and that nitrate of silver especially, which generally agrees with membranous conjunctivitis is prejudicial in the genuine disease.

(To be continued.)

[3] Deutsche Klinik, 1853, No. 35; and Arch. für Ophthalmologie, Bd. I., Abt. i., p. 168 (Berlin, 1854); a translation of the latter appeared in Archiv. Belges de Médecine Militaire, t. xvii., p. 32; and in the London Medical Review for 1860.

RINGWORM (OF THE HEAD): DIAGNOSIS AND TREATMENT.

BY ALDER SMITH, M.B. LOND., F.R.C.S.,
RESIDENT MEDICAL OFFICER AT CHRIST'S HOSPITAL, LONDON.

(Continued from p. 55.)

The treatment of chronic ringworm.—There are some cases which no ordinary remedies, even under skilful hands, will cure. The treatment of these I now pass on to describe; as well as the treatment of those cases in which the disease has been attended to until the hair has grown again, and then neglected for months, or even years (because it was supposed to be well), until some special reason has brought it under the notice of an expert.

Here the difficulty is not to find some parasiticide that will destroy the ringworm fungus, but to bring the remedy into contact with it. In recent ringworm the conidia only penetrate a certain distance into the follicles, and therefore the disease is easily cured by almost any remedy; *but after a time they penetrate to the very bottom of the follicles*, which it must be remembered are even below the true skin, and into the roots of the hairs. Therefore it is impossible to reach the fungus by any ordinary remedy applied to the surface of the scalp. Again, the stumps are so diseased that they cannot be extracted by epilation, but always break and leave the root part swarming with the fungus down to its very base (*vide* diagram, p. 53). One must therefore select a remedy that will penetrate deeply into the follicles, and Mr. Marshall's preparation of oleate of mercury is certainly the best for this purpose, combined afterwards, if necessary, with the treatment I will call "the artificial production of kerion."

I have seen oleate of mercury cure the most inveterate cases that have existed for many years, and on which all sorts of other remedies had been tried in vain. It does not cause much pain—very often none; and although I have used it most extensively for years, I have never seen even slight salivation caused except once, and that was in a child of four years of age. It is prepared as a thick solution in oleic acid, and sold as a 10 per cent. and 5 per cent. solution. I use the 5 per cent. for children under eight years of age, and the 10 per cent. to those over that age, if the skin will bear it without much irritation. It is advisable to have acetic ether mixed with it in the proportion of one part of ether to seven parts of oleate. This increases the penetrating power. The mixture must be kept in a stoppered bottle.

The treatment is commenced by having the hair cut short, about a half to one inch long. The head should then be thoroughly washed with soft soap and water, and when dry *the oleate should be rubbed well into the entire scalp*, if the disease be at all extensive, with a small sponge mop. This must be done regularly, especially into any patches, night after night, and again in the morning into any well-marked diseased places. The caps before described should be worn at night, special care being taken that the oleate does not run on to the face or pillow-case, as it will produce much irritation, and even a rash. It is advisable to apply a thin towel, like a turban, round the head, as well as the cap, to prevent any oleate getting on to the face.

It is most important that the head should not be washed more than once a fortnight. If water be constantly used, it tends to prevent the oleate from soaking to the bottom of the hair-follicles, which is so essential to the success of this remedy. Therefore, while the case is under treatment, which may be from three to six months, wash well every fortnight, cutting the hair again if necessary, removing all the scabs and yellow incrustations with the point of a pair

[4] Wecker and Landolt: Traité complet d'Ophthalmologie, tom. I., p. 335. 1879.

of forceps, small-tooth comb, or other means, and then examine the scalp with a lens, to see how the case is progressing, before applying the oleate again. Of course care must be taken that no mercurial symptoms arise during the treatment. If the 10 per cent. solution produces too much irritation, the 5 per cent. must be substituted. It is important to obtain the oleate from a first-class chemist.

After from three to six months there is very often a complete cure, but at any rate the disease will be very much better, and restricted to the original patches or a few disseminated stumps. At this stage of the case I strongly advise the treatment I call the artificial production of *kerion*—i.e., that swollen, raised, inflamed, and infiltrated state of the scalp, which sometimes accidentally occurs during treatment, and *which always results in a speedy cure of the disease.*

The artificial production of kerion.—Kerion should be produced, if possible, in old chronic small patches of ringworm that have resisted all other treatment for months, but not in those cases where the disease extends over a large extent of surface. Croton oil is the best irritant for causing this inflammatory condition, but it must be used with great caution, and at first only applied to a small place, and its effect watched. I generally put it on a patch the size of a shilling, or less, with a small camel's-hair brush, and order a poultice to be put on at night. Then, if it has not set up severe inflammation and pustulation by the next day, which is very rare, I apply it again, keeping poultices constantly on day and night. A daily application of the oil for three to six or ten days, together with constant bathing with warm water, and poulticing with linseed-meal, will rarely fail to set up such severe inflammation that the patch resembles true kerion. It becomes very tender, swollen and puffy, pustular, and is usually covered with a thick yellow incrustation. On removing this yellow substance with the point of the forceps, and a sponge and warm water, the skin underneath will be found very red and tender, and sometimes a muciform or purulent discharge exuding from the follicles, and, what is most important, *the hairs and stumps loose in the follicles.* They either come away with the discharge, or can be easily pulled out. If the patch be very much swollen the hairs, on being extracted, come out from a considerable depth, even half an inch.

Sometimes this effect is rapidly produced, at others it is most difficult to obtain; and you may apply croton oil over and over again without getting the swollen, puffy state of the scalp you require. Care should be taken not to produce an actual slough of the upper stratum of the skin. When the patch is so thoroughly inflamed and infiltrated that the stumps come out easily, I content myself with simple poulticing and bathing for a few days, and then, when the tenderness has abated, and the yellow incrustation has been removed by bathing, I begin to pull out all the hairs and stumps that are left on the patch, using for this purpose a broad-pointed pair of forceps.

The great aim of this treatment is to cause inflammatory swelling and effusion into the tissues around the follicles, so that the stumps which otherwise would break off on attempted epilation, will now come out with the discharge, or can easily be extracted; in fact, very often in a short time an inveterate patch of ringworm, that has withstood every other treatment for years, can be transformed into a smooth, slightly raised place, utterly destitute of all hair and stumps, and practically well.

Soothing remedies, such as poultices or water-dressing, should be applied till all the inflammatory swelling has subsided, while the stumps are removed day by day by the attendant. I usually see a case in this state every three to seven days, and carefully examine the spot with a lens to see if there are any stumps to be extracted. If it happens that any of them break off on attempted epilation, it is better immediately to place a minute drop of croton oil on the follicle, which will probably cause the expulsion of the stump in a few days. At the next examination I follow the same plain, and so on until I cannot find a single stump, even after watching for a fortnight. Then I apply tincture of iodine or cantharides to the places, which stimulates the new downy hair to grow. When once a stump has been thoroughly extracted, there is no fear of the new hair becoming infected with the fungus, as some of the parasiticide used is sure to get into the follicle, and destroy any conidia left there.

If there is more than one patch at first, I soon begin to apply the oil to the second or third, when I see how the first one is progressing, and thus try to get every place converted into kerion. The largest patch I have inflamed at a time has been about the size of a five-shilling piece, but I should never attempt such a large one at first, but would prefer to treat half or a third of it, and then the rest.

Even if the swollen condition of kerion cannot be produced, this treatment very rarely fails in loosening the stumps and curing the disease. While the croton-oil treatment is being followed out, a little oleate or carbolic-glycerine should still be applied to the other parts of the scalp. Even when one or more patches are treated in this way, in the course of time other small places or isolated stumps reappear here and there; therefore, the whole scalp should be examined when the case is seen week after week, and any stumps removed or touched with croton oil, as described further on under disseminated ringworm. But when the case has been pronounced absolutely well, these isolated stumps will often crop up time after time for months. Thus children that are supposed to be cured ought to be examined regularly for a few months.

Some remedies may produce kerion unexpectedly. I have seen carbolic-glycerine and citrine ointment act in this manner; and lately oleate, applied to the heads of three children in one family, produced severe kerion with excellent results in two cases. This is the only time I have seen oleate produce kerion.

Sometimes, if croton oil fails to produce the necessary inflammation, I use a minute quantity of tartar emetic ointment as well; but this is more apt to produce a slough than the oil, and should only be used with extreme caution on a place already sore. The friends are, as a rule, greatly frightened when kerion is produced; so it is better to explain to them beforehand the reasons for adopting this treatment, and the result expected from it. The condition is somewhat painful, and much resembles the formation of an abscess; the glands often enlarge about the back of the neck, but I have never seen them suppurate.

Especial care should be taken not to apply too much oil at a time, and that the poultice is firmly fastened to the spot, otherwise the oil may run on to other parts of the head or forehead; or, by the poultice slipping, kerion may be produced just where it is not wanted. If the oil by any means gets on to the pillow-case, and the child rubs its face on it, of course a pustular eruption will follow. I lately saw a little girl who had managed to rub the oil on the pillow-case, and then all over her forehead and cheeks. This produced a most universal crop of small pustules, and gave me very great anxiety lest some marking should ensue; but with soothing applications and simple ointment, the slight crusts were speedily removed, and not the least mark remained. Of course, with proper precaution, this should never occur.

The bare patches that remain after this treatment may continue for some months, but the hair will grow again sooner or later. I have seen a few cases where, after very severe irritation and some slight sloughing, the hair has not thoroughly grown again. But, as this remedy is only to be used after all others fail, it is better to get a slight loss of hair in one place than for a child to be unable to go to school, and thereby lose education. Even if some of the hair-follicles are destroyed by this treatment, many hairs will still grow on the place, and a distinct bald patch is never left. Croton oil must of course be applied by the medical attendant; and I may mention, lastly, that I have never seen any internal irritation from its use, or erysipelas.

(To be concluded.)

ABSORBENT AND MEDICATED SURGICAL DRESSINGS.

BY SAMPSON GAMGEE, F.R.S.E.,
SURGEON TO THE QUEEN'S HOSPITAL, BIRMINGHAM.

BEFORE me is a cup of water, on which a piece of fine cotton-wool, like that used in jewel-boxes, has floated for thirty-eight days. I have frequently pushed the cotton to the bottom of the cup, but it has instantly risen to the surface, and seems likely to float indefinitely. Pledgets of cotton made absorbent by removal of its oily matter, when dipped into the same cup, sink below the surface of the water in three seconds, and rapidly fall to the bottom.

When I first became acquainted with this fact, I made

pads of the absorbent cotton in fine gauze, believing that they would be softer for compression, and more favourable to the dryness of wounds by their superior absorbent power, than oakum pads. The gauze used was very fine and unbleached, similar to that employed by nurserymen (under the name of "tiffany") to stretch under the roofs of their conservatories. Experiment proved that the gauze in question is non-absorbent to such a degree, that a pad, made by covering with a single layer of it a pledget of absorbent cotton, will float on water for many days.

The desideratum suggested itself, of making the gauze absorbent like the cotton, and I find that this result is attained by the process of bleaching. Pads made of the absorbent gauze and cotton take up water as rapidly as blotting-paper, and sink to the bottom of a vessel in a very few seconds. As one illustration of the practical advantage of these dressings to wounds, I shall abstract the main facts of a clinical history, for recording which I am indebted to my dresser Mr. Arthur Holdsworth.

A woman, aged sixty-one, in good health, was admitted into the Queen's Hospital under my care, Sept. 18th last, with a swelling over the left shoulder and side of neck, extending laterally from the armpit to a level with the larynx, covering the posterior triangle and the lower half of the anterior, the whole of the clavicle and the upper part of the pectoralis major. The antero-posterior axis was the longest, and measured thirteen inches.

The tumour had been of slow growth for ten years, rapid for the last six months. It was elastic and fairly movable, and only troublesome for its size and weight; covering skin dimpled. Diagnosis, lipoma.

Operation.—On Sept. 24th, under ether, I made an incision from a point one inch outside the episternal notch, to another about midway along the spine of the scapula. The growth was then dissected from off the subjacent tissues, from behind forwards, being very adherent over the acromion, but free and lobulated in front. It reached to the trapezius, and extended its lobes deep into the anterior triangle of the neck, exposing on its removal the pleura covering the apex of the left lung, and the great vessels and nerves to the head and upper extremity. Very few drops of blood lost; no vessel tied. Immediately after the removal of the tumour, the wound measured superficially eight and a half by eight and a half inches. I brushed it out lightly with styptic colloid, brought the edges together with seven silver sutures, inserted a drainage tube, and compressed with a shoulder spica, over oakum pads. The patient passed a good night, and next morning, the temperature was 101·5°, pulse 118, respiration 32. There was not a single bad symptom.

On the 1st October (seventh day), pulse 94; respiration 24; temperature precisely normal, which it continued throughout, with the exception of only one day (Oct. 13th), when the old lady had a slight cough for a few hours, and the temperature rose to 101·2° at night. Next morning it was again normal.

At the end of a week the patient was allowed to get up for a few hours, after the removal of the drainage-tube and sutures and the application of fresh dry pads and compression. The edges were united for nearly the whole length, but in the course of another week the union gave way a little. It was maintained with strips of adhesive plaster and compressing pads of absorbent muslin and cotton. The wound was not exposed for another week, and the cicatrix was then quite solid, as shown in the annexed woodcut.

I have since used the same materials, with the occasional addition of pitch-pine sawdust in absorbent gauze, with the very best results in a variety of cases; amongst others, in a compound fracture through the ankle, a large sloughing ulcer of the foot, a scirrhous ulcer of the mamma, and an extensive gangrenous wound over the breast.

My friend and colleague, Professor Bostock Hill, has instituted experiments, which prove that after treating with iodine, borax, and tannin, the materials above referred to preserve their absorbent properties, and I confidently anticipate that absorbent and medicated dressings will prove of essential service in wound-treatment.

The absorbent pads are made by lightly folding the muslin over absorbent cotton without stitching. I venture to suggest to accoucheurs, that in childbed such pads would be cleaner, safer, and more comfortable than napkins, and a large number of them might be used and burnt at far less cost than washing. The materials are cheap, and most agreeable to manipulate. I shall be happy to furnish specimens to surgeons who may desire to try them, and I take this opportunity of acknowledging the cordial assistance I have received from the manufacturers, Messrs. Robinson and Son, Wheatbridge Mills, Chesterfield.

Birmingham.

CALOMEL FUMIGATION.

By WILLIAM S. BYRNE, A.B., M.B., M.Ch., T.C.D.,
SENIOR HOUSE-SURGEON, METROPOLITAN FREE HOSPITAL.

I AM induced to bring to the notice of the medical profession a little apparatus for the purpose of calomel fumigation, which I have never seen used at any of the London hospitals, but which has been employed frequently in some of those in Dublin. It was originally invented, I believe, by Mr. Kane, late surgeon to Jervis-street Hospital, and has been used with much success in cases of syphilitic and other ulcerations about the throat and mouth, where local application of mercury seemed desirable. The apparatus, as invented by Mr. Kane, consists of a glass tube about eight inches and a half in length, three-quarters of an inch in diameter, which tapers towards a point for about two inches at one extremity, and a bulb blown on one side of the cir-

cumference about three inches from the same extremity for the purpose of holding the calomel. In the other extremity of the tube is placed a cork, which is pierced by a piece of glass tubing, small enough to be encircled by the india-rubber tubing of Richardson's ether spray apparatus, which is used for the purpose of propelling the fumes of the calomel on to the part to which the point is directed, when the calomel is sufficiently heated by a small quantity of spirit, which saturates a piece of sponge placed under the bath in a small pan made of tin or thin iron, and hung on the tube by two hooks of iron wire.

When using Mr. Kane's fumigator in cases of throat disease, I have had considerable difficulty in passing the point into the mouth, so as to direct it towards the parts affected, as the flame was so near the patient's face, as to be at least disagreeable, if not dangerous; so I had some tubes[1] made by Messrs. Townson and Mercer, Bishopsgate-street, E.C., with the bulb five inches from the apex of the conical extremity, thus moving it back a considerable distance, and the result has been most satisfactory.

When the bulb has had a small quantity of calomel placed in it, then heated by means of the spirit sponge, and the india-rubber bag of the ether spray apparatus compressed, the fumes stream out and give the part to which it is directed a white coating of the vapour. All those points are shown in the accompanying woodcut.

At the Metropolitan Free Hospital this method of fumigation has been used frequently during the past six months, once or twice a week, according to the nature of the case, being usually sufficient for its application, and in no case has salivation in the slightest degree occurred.

I am induced to bring this subject forward solely for the reason that many medical gentlemen learned in such matters, to whom I have shown the apparatus, were unacquainted with it, and from its having proved so satisfactory in this hospital I have been advised to publish two cases which have been benefited by its use.

CASE 1.—Annie J——, aged sixteen years, came under treatment at the Metropolitan Free Hospital on Aug. 21st, 1879, suffering from extensive ulceration of the hard and soft palate, tonsils, and pharynx. No history of specific disease, either hereditary or otherwise, could be obtained. It appeared that she had been suffering for twelve months, and during that time had been under the treatment of different medical men, but without any decided improvement. She was a pale, anæmic-looking girl, and had been unable to take solid food for some months, owing to the excessive pain in mastication and deglutition. She was fumigated twice a week from the date of her first attendance, cod-liver oil was given internally, and she was discharged cured on Oct. 29th, 1879.

CASE 2.—John G——, aged twenty-nine years, a painter, had been suffering from ulcerated sore-throat since he had syphilis (three years ago), and had been attending as outpatient at this hospital ever since, off and on; and although he derived great benefit from the treatment adopted, yet he was never perfectly cured. He resumed attendance for his throat about the middle of September, 1879, and then was unable to eat solid food of any kind, his diet chiefly consisting of beef-tea, milk, and eggs. He was very hoarse, and only spoke with great difficulty and pain. Mr. Walsham examined him with the laryngoscope, and found large patches of ulceration on the right aryteno-epiglottidean fold, on the epiglottis, and on both tonsils. He was fumigated regularly every week, and given iodide of potassium internally. The day after the first fumigation he declared he felt better, and was discharged, perfectly cured, on Nov. 6th, after seven weeks' treatment.

[1] The tubes are supplied to this hospital, with pan, &c., at a cost of 10s. per dozen.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

UNIVERSITY COLLEGE HOSPITAL.

[THROAT DEPARTMENT.]

SYPHILITIC DISEASE OF TONGUE AND LARYNX; PARTIAL IMPROVEMENT UNDER IODIDE OF POTASSIUM; MARKED IMPROVEMENT UNDER MERCURY.

(Under the care of Dr. POORE.)

E. R——, aged twenty-five, a barman, came to the hospital on Dec. 11th, 1878, complaining of hoarseness. The patient looked ill, and there was a distinct history of syphilis, with the scars of old ulcerations on the arms and legs. The tongue was enormously enlarged, deeply fissured in the centre, and uniformly indurated. There were no separate swellings visible on the tongue, but the organ seemed to be the seat of a uniform infiltration. Round the margin of the tongue were one or two superficial ulcers. The epiglottis and the laryngeal mucous membrane were slightly congested. He partook rather freely of alcoholic liquors, which his occupation brought in his way. He suffered from irregularity of the bowels and dyspepsia. A mixture containing fifteen grains of iodide of potassium and half a drachm of sulphate of magnesia in each dose was given, and a lotion containing half a grain of perchloride of mercury to the ounce, as a wash for the mouth, was ordered. His improvement was immediate and rapid, and in a few weeks the ulceration of his tongue had disappeared, and it had become soft and natural to the feel, and much diminished in size.

Early in February the patient caught cold, and his laryngeal symptoms suddenly increased. The epiglottis was now seen to be very much swollen and reddened, and the thickened edge was the seat of superficial ulceration. The patient was completely aphonic, was troubled with an incessant cough, and could swallow nothing but the blandest liquid, in consequence of the pain which it caused him. An examination of the lungs showed a slight and doubtful amount of consolidation of the right apex. Emaciation was rapid and extreme, and the condition of the patient at this time seemed to warrant the worst prognosis. Cod-liver oil and syrup of the iodide of iron were ordered, together with an inhalation of compound tincture of benzoin, and sedative lozenges. The relief thus afforded was slight, but the application of a strong solution of nitrate of silver to the epiglottis notably diminished its sensibility. So much so was this the case that the patient asked to be allowed to apply it for himself, which he readily learnt to do. In March he was sent away to St. Leonards in order to avoid the inclement spring weather. He returned somewhat improved in general health, but with the local condition unaltered. His slight gain in strength soon disappeared, and it was then resolved, in spite of his prostrate condition, to try the effect of mercury. Mercurial ointment was accordingly rubbed into the sides of the chest every night, and with the very best results. The ulcers on the epiglottis quickly healed, the swelling of the mucous membrane subsided, the power of taking nourishment returned, and the patient's general condition rapidly improved. The gums soon became tender, when the inunction of mercury was discontinued, to be resumed after a week's rest. The man's improvement has been continuous, and at present he is able to follow his occupation of a barman. An abscess, probably due to the breaking down of a gumma, had recently appeared in the calf of the right leg, but this rapidly got well after being tapped with an aspirator by Mr. Godlee.

Remarks.—The condition of this patient's tongue when he first came under treatment was one of great interest, the enlargement and the induration of the organ being both excessive. Although the tongue rapidly improved under

iodide of potassium, it will be noted that the larynx became affected in the manner indicated, while he was still taking large doses of that drug; and it is remarkable and instructive to note that no amelioration of the laryngeal condition took place, in spite of local treatment and favourable hygienic conditions, until the inunction of mercury was resorted to. One naturally felt considerable reluctance to give mercury to a patient in such a miserably shattered condition, but the result proves that any fears one might have had as to the possible ill effects of the drug were groundless.

ROYAL HOSPITAL FOR DISEASES OF THE CHEST.

CASE OF GRAVES' DISEASE.

(Under the care of Dr. MURRELL.)

ANNIE G——, a bright intelligent child, aged fourteen, first came under observation in November, 1878, suffering from exophthalmic goitre. She was a native of London, and had lived in London all her life. She never had chorea or fits of any kind. Her father died of melancholia, and her maternal grandmother and aunt died of phthisis. She had four brothers and one sister, all well and strong. She was quite well till about four years before, when she was greatly frightened by her father, in one of his insane fits, running after her. Some five or six months later she complained for the first time of palpitation; next her throat began to enlarge, and after that her eyes were noticed to be unusually prominent. About a year later she had rheumatic fever; after that the palpitation was much worse. After the fever she spat a little blood, but never much. All the symptoms had been increasing in severity for two years.

The eyes were very prominent—so prominent indeed that people in the street noticed her, and the boys called after her "cat's eyes" and "horse's eyes." There was no difficulty in closing the lids, but the mother stated that at night, when asleep, "the eyes remained open, and looked quite frightful." The degree of protrusion was said to be somewhat variable, but it was equal on the two sides. The eyes had never been inflamed in any way. Both pupils were dilated, and contracted somewhat slowly under the influence of light.

Mr. Tweedy kindly saw the patient, and the following notes were taken from his dictation:—"Right eye, V = $\frac{6}{12}$; left, $\frac{6}{18}$. Right eye, No. 2 Jaeger, from 12 inches to 18 inches, 12 inches being the nearest point at which she can make it out. Left eye, No. 4 Jaeger, from 13 to 16 inches, these being the nearest and farthest points respectively. Pupils react well to light, but are more active in dilatation than in contraction. — Ophthalmoscopic examination: At 4 feet the vessels of both eyes give clear erect images (hypermetropic refraction). Right eye: veins broad and distinctly tortuous; on disc the arteries are quite as large as the veins; no visible pulsation of either arteries or veins. Left eye: normal disc and fundus, both as regards colour and relative sizes of arteries and veins, or it may be they are more nearly equal in size than natural; no visible pulsation in either veins or arteries. With convex spherical, 36 inches, right eye sees $\frac{6}{12}$—i. e., has manifest hypermetropia of $\frac{1}{36}$. Left eye with same lens sees $\frac{6}{18}$. When the eyes are extremely adducted there is quite $\frac{6}{8}$ in. between the outer margin of the cornea and outer canthus, and the eyes seem to fill the orbit. After this examination, half an hour from the beginning, and after knowing the letters, she says that with the right eye she can see $\frac{6}{18}$, and with the left $\frac{6}{12}$."

Patient's neck was found to measure 12½ inches, taken at the level of the sixth cervical vertebra behind and the most prominent point in front. The thyroid tumour measured 2½ inches from side to side. It varied somewhat in size from time to time, but the lobes were equally enlarged. Patient suffered greatly from shortness of breath on the slightest exertion, and at times even when perfectly quiet. She had often great difficulty in swallowing, everything "seeming to go the wrong way." She suffered very greatly from palpitation, and there was "a great throbbing" in her head. On physical examination of the chest, a loud systolic musical murmur was heard at the heart's apex, and was conducted into the back and nearly all over the front of the chest; the heart was greatly hypertrophied. The pulse was weak, very irregular, and usually 130. No thinning of eyebrows or eyelashes; no enlargement of liver or spleen; digestion bad; bowels regular; catamenia not appeared; urine free from sugar and albumen.

Such was the history of the case. Treatment was commenced at once, five minims of tincture of belladonna being ordered in a drachm of water every four hours, and this at the expiration of a week was increased to ten minims every four hours. At the expiration of a fortnight there were no signs of improvement, and as the pulse was weak, irregular, and over 100, a drachm and a half of fresh infusion of digitalis was ordered in an iron mixture three times a day. This was taken for three weeks, and, with the addition of a belladonna plaster, succeeded in quieting the heart a little, but it did no good in any other way. It was then determined to give the belladonna a more extended trial, and she was ordered ten minims of the tincture in a little water every hour during the daytime, and at night when awake. This was taken for seven consecutive weeks without benefit. She was brought fully under the influence of the drug, and her sight was so dim that she could not read, and at times her throat was so dry that she could hardly swallow. The iron and digitalis mixture was tried again, but without benefit. Nitro-glycerine, the 1 per cent. solution, in half-drop doses, was next given experimentally, but it did no good. About this time patient began to suffer from cough, with copious thick yellow expectoration. Her chest was frequently examined, but nothing wrong could be detected with the breath-sounds, except, perhaps, that they were a little harsh. There was no dulness and no crepitation. She was given pancreatic emulsion, and some cough mixture, and on this she certainly improved, at all events as regards her general condition. A week or two later she suffered most severely from night-sweating, and this quickly pulled her down again. Her temperature in the middle of the day was nearly always over 100°, and her pulse 112 or more. She was ordered a drachm of saturated aqueous solution of picrotoxine in eight ounces of water, one or two teaspoonfuls to be given every night at bedtime, or oftener if necessary. This soon stopped the sweating, and the patient improved once more. The belladonna treatment—this time six minims every hour—was then tried again for a fortnight, with the addition of extract of belladonna and glycerine to rub in over the tumour, but again it completely failed. She then took quinine, iron, and other tonics, in conjunction with cod-liver oil, for a month or more, but she was obviously getting worse. The palpitation kept her awake at night, and the shortness of breath was especially distressing. There was still a little cough, and the expectoration was at times tinged with blood. The next complication was diarrhœa; this proved most obstinate, but was at last checked by half-drachm doses of carbonate of bismuth. After this she underwent a course first of bromide of potassium, and then of phosphorus, but without any benefit. Later on belladonna was tried for the fourth time, ten drops of the succus being given every three hours for the first week, and then every alternate hour for another week, but it did no good. Iodide of potassium and painting the tumour with iodine were also tried in vain. About this time a change was noticed in the character of the murmur, and it was quite clear that there were now two apex systolic murmurs, one musical and the other rough, and they were somewhat differently conducted. The cough too was worse. There was great shortness of breath, especially on going upstairs and when she lay on her back. The throat was dry, and she had great difficulty in swallowing. She complained much of headache, and said it "felt as if it would open." The diarrhœa returned, and she died on Nov. 17th, 1879, having been under treatment just a year, worn out with pain and suffering. The patient was of a most amiable disposition, and, to use the mother's expression, "never made a complaint during the whole of her long illness."

The points of interest in the case are:—1. Origin from fright. 2. The order in which the symptoms appeared—palpitation, enlargement of gland, exophthalmos. 3. The ophthalmoscopic appearances. Trousseau, vol. i., p. 544 (New Sydenham Society), quotes Dr. Withuisen on this point; or fifth edition, vol. ii., p. 552 (French). 4. The absence of change in temper, the patient not being at all irritable. 5. Resistance to treatment. Several trials of belladonna failed. Some cases, on the other hand, cured with belladonna, were recorded in THE LANCET, June 27th, 1874; and a successful case with belladonna, under Mr. Hutchinson, is recorded in the *Medical Times and Gazette*, 1874, vol. ii.

TUNBRIDGE WELLS INFIRMARY.

CASE OF COMPOUND COMMINUTED FRACTURE OF THE EXTERNAL CONDYLE OF THE FEMUR AND PATELLA, IMPLICATING THE KNEE-JOINT, PRODUCED BY A FRAGMENT OF GUN-BARREL; RECOVERY; REMARKS.

(Under the care of Mr. MANSER.)

FOR the following notes we are indebted to Mr. John Footner, F.R.C.S., house-surgeon.

B. W——, aged thirty-six, a tailor, of temperate habits, was admitted on March 19th, 1879, suffering from a severe gunshot wound of lower end of femur. About half an hour before, whilst watching a friend shoot a dog, the gun burst, and a jagged sharp-pointed fragment of the barrel, two inches and three-quarters long and three-quarters of an inch in its widest part, entered the external condyle of the left femur on its outer aspect, penetrated it, and then, taking an upward direction through the knee-joint, perforated the patella about its centre, shattering it into several fragments, and protruding through the skin over it to the extent of an inch.

Chloroform was administered, and Mr. Manser, after enlarging the wound in the skin under carbolic spray, removed the fragment of gun-barrel, together with some comminuted portions of patella. The aperture of entry was large and jagged, admitting two fingers. Internally a large cavity in the bone could be felt, containing splinters of the external condyle and some portions of the patient's trousers, which were removed. A drainage-tube was inserted, the wound dressed antiseptically, and the limb placed on a McIntyre's splint. A good deal of blood was lost while the patient was being brought to the infirmary.

A subcutaneous injection of morphia was administered in the evening, but the patient slept badly, and complained next morning of considerable pain about the wound. The wounds were dressed, and looked healthy. There had been a good deal of sanious oozing. Pulse 112; temperature 103° F. On the 21st the wounds were dressed. Tongue clean and moist; appetite good; pulse 104; temperature 101·8° F. On the 26th the wound of exit had healed by first intention, and the other wound was looking healthy. There was no effusion into the joint. Pulse 100; temperature 99·8° F. On the 27th, at 1 P.M., he had a prolonged rigor, lasting three hours. An ounce of brandy was administered, and hot bottles applied to the feet. There was great pain in the wound; no swelling of joint. Ordered four grains of sulphate of quinine every four hours. Pulse 120; temperature 101·8° F. On the 28th he had another rigor at 6 A.M. Brandy (one ounce) repeated. The parts about the wounds were swollen and very painful; tongue dry and furred; pulse 128; temperature 103·4° F. On the 29th he was better; there was less fever and less pain in the wound. Pulse 116; temperature 101° F. On the 30th the discharge from the wound was offensive. The antiseptic dressings were discontinued, and a linseed poultice was applied. He vomited twice. Quinism was produced. On April 3rd a cutaneous erysipelatous rash appeared outside the thigh above the wound and below along leg. A line was drawn above this with solid nitrate of silver. A mixture containing fifteen drops of tincture of perchloride of iron and two grains of quinine were ordered every four hours, and eight ounces of brandy daily. Pulse 104; temperature 104·2°. On the 4th the red blush had extended above the line of nitrate of silver. Collodion and perchloride of iron were painted over it. The discharge from the wound was profuse. Pulse 128; temperature 104·4°. On the 9th the tongue was dry and brown. The thigh, hip, and leg, which had become tense and brawny, were freely incised in several places, and linseed poultices were applied. The abdomen was tympanitic; turpentine stupes were laid over it. A pint of champagne and four ounces of brandy to be taken daily. Pulse 116; temperature 102·6°. On the 10th the pain had been relieved by the incisions, some of which discharged pus and slough. The abdomen was still tympanitic. The redness extended along flank to waist. He had another rigor at 5.30 P.M. Diarrhœa six times in twenty-four hours. Pulse 120, temperature 103°. On the following day he was very feeble; the diarrhœa still continued. An enema of starch and opium was administered. On the 12th he said he felt much better. Tympanites was less, and the tongue was fairly clean and moist. The diarrhœa had stopped. Pulse 116, temperature 97·8°. On the 13th he was worse again. Tongue dry and brown; rash extended up to axilla, but less vivid. Pulse 128, temperature 102·8°. On the 16th he was apparently in a sinking condition, and had low muttering delirium, picked bedclothes, &c.; rash extended to penis and crotum; scrotum freely incised; retention of urine; catheter introduced. Pulse 128, temperature 100·6°. On the 18th he was decidedly better; tongue was cleaning and moist, delirium gone; took nourishment well; pulse 128; temperature 100·4°. On the 22nd erysipelatous rash had quite faded away, and patient was convalescent. Pulse 108, temperature 99°.

From this date the patient recovered rapidly. The wounds took on a healthy action. A portion of the scrotum sloughed, but the skin, as usual, was completely restored. During his convalescence (on June 8th) an erythematous blush reappeared along the inside of the affected thigh, accompanied by headache and a high temperature (104° F.), but it quickly faded away, and the temperature sank to normal in four days. On July 1st the splint was removed and a gum-and-chalk bandage was applied, with an aperture for dressing the wound. It was found that the knee-joint had undergone firm fibrous anchylosis. The patient was discharged on July 1st with the wound (the aperture of entry) nearly healed, only a sinus being left. No dead bone could, however, be detected with the probe.

Remarks by Mr. MANSER.—This case is worthy of notice as showing what nature, with a little assistance from art, will do towards repairing the most severe injuries to joints. Here was a man with a compound comminuted fracture of condyle of femur and patella, a large piece of gun-barrel having passed completely through the joint from without inwards; that is, it entered on the outside, and had to be extracted from the inside, the metal being so firmly wedged in between the bones that it was found impossible to remove it by the way it had entered. Not very many years ago this man's leg would have been amputated, or his joint excised, without a doubt as to the propriety of so doing; it being almost a fundamental rule that such injuries to joints necessitated amputation. In the present instance I had serious doubts as to the advisability of leaving the case to nature, but consoled myself with the thought that amputation could be performed later, if necessary. It will be observed that, notwithstanding the use of carbolic spray, the patient passed through a most severe attack of erysipelas, which at one time seemed likely to prove fatal. He had low muttering delirium, picking at the bedclothes, and looked altogether like a dying man. Free incisions and poultices gave great relief. The continuance of the antiseptic treatment appeared to retard suppuration, and it was curious to note that the wounds and the skin about them remained quite free from erysipelas and looked healthy, whereas the whole of the leg, thigh, scrotum, and abdomen was a mass of inflammation. So soon as carbolic spray was discontinued the wounds began to discharge more freely. Drainage tubes were kept in the joint and also in the incisions made in the thigh for the erysipelas, until healing was nearly completed.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

Visceral Lesions in inherited Syphilis.—Malformation of Heart.—Dislocation of Thumb.—Granular Contracted Kidney.—Membranous Laryngitis.—Cancer of Lung.

THE ordinary meeting of the Pathological Society was held on Tuesday, the 20th inst., the President, Mr. Hutchinson, in the chair. Dr. Coupland raised the interesting question of the nature of the parenchymatous visceral lesions in inherited syphilis; Dr. Lees discussed the causation of the cyanosis and clubbing of the fingers met with in congenital malformation of the heart, and Dr. Pye-Smith showed a specimen of membranous laryngitis, which he believed was not diphtheritic. The President announced that no discussion would be held this session, but that the Council had decided to have a discussion in November next on Rickets.

Dr. COUPLAND showed specimens from two cases of Retarded Hereditary Syphilis. Case 1, was that of a girl

aged thirteen, admitted into the Middlesex Hospital (under the care of Dr. Greenhow) in September, 1877, suffering from renal dropsy of ten months' duration. A firm but irregular tumour was noted in connexion with the liver, and its syphilitic nature was inferred from the following facts:—She was the seventh child of a family of twelve (including three still-born), four dying in infancy, most after having shown some of the usual signs of congenital syphilis. First, second, and sixth children were healthy, but the eleventh was weakly. The patient had notched incisor and an opacity on the cornea. She died in December, 1877, from renal disease. The liver was greatly deformed, and the seat of two large firm caseating gummata, chiefly of the right lobe. The spleen weighed nine ounces and a half, was indurated, but not lardaceous. There was well-marked parenchymatous nephritis. Case 2 was that of an ill-developed girl, under the care of Mr. Lawson, who died at the age of eighteen years and a half, in November, 1879. She was one of a family of thirteen (seven of whom had died in infancy), and the mother also had two abortions. No history of infantile syphilis could be elicited in this case, the patient being said to be in good health until 1876, when she began to suffer from painful swellings near the knee-joints. This was followed by other nodes in front of the leg, and on the forearms, and in October, 1878, she was also under treatment for necrosis of the frontal bones. She died from nephritis, and cellulitis of the right leg following suppuration of a node and necrosis of the tibia. At the autopsy numerous isolated, ill-defined periosteal masses (gummatous) were found in connexion with the right tibia, but there was no marked osteitis with the exception of a patch of superficial necrosis connected with one of the suppurating gummata; there was necrosis of the frontal bone, and two gummata in the frontal and left parietal regions, one of which involved both tables. There was also perihepatitis, and a small caseous gumma in the substance of the liver, the organ itself being extremely fatty. The spleen weighed 13 ounces, was firm and glistening, but not lardaceous. Kidneys in same condition as the other case. In this case there was characteristic notching of the left upper central incisor. In neither case was there any ground for believing the disease to have been acquired; whilst in both the condition of the teeth and the striking family history were strong presumptive evidence of hereditary taint. Dr. Coupland referred to the difficulty of speaking with absolute certainty in this class of cases, to which Lancereaux first drew attention; but in the light of recent knowledge on the lesions of hereditary syphilis the grounds for doubting their existence had been dispelled. He referred to two analogous cases recorded in 1874 by Professor Laschkewisch of Charkow, and remarked upon the frequency with which renal disease (apart from lardaceous change) carried off the subjects of tertiary syphilis.—The PRESIDENT doubted how far the term "late" was applicable to these specimens. These lesions occurred at about the age of Dr. Coupland's cases, and he had met with them in many cases during life, but had only rarely been able to demonstrate them post mortem. He could only remember to have examined four or five such cases after death, and in one of them the changes found were just like those shown. He confirmed Dr. Coupland's statement, that it is the disease of the kidneys that proves fatal to these patients.—Dr. BARLOW considered the liability to nephritis in such cases very important; he had recently seen, in conjunction with Dr. Gee, a child at the Hospital for Sick Children, suffering from very marked signs of inherited syphilis, who died from parenchymatous nephritis without having suffered from scarlet fever or other known exciting cause of this malady.—Dr. MAHOMED had seen three or four cases of granular contracted kidney in conjunction with congenital syphilis, but in each case there was also lardaceous degeneration, which he thought was the primary lesion, and it might also be the starting point of tubular nephritis.—Dr. GREENFIELD had seen two or three cases of lardaceous degeneration, of the kidney in young persons with gummata and other evidences of syphilis. He recently met with the case of a woman aged twenty-three, who from the age of twelve had suffered from marked syphilitic lesions and disease of the kidney. At the autopsy he found syphilitic meningitis, symmetrical nodes on the cranium, nodes on the dura mater, three large gummata in the spleen—but none in the liver,—and very extreme lardaceous and interstitial degeneration of the kidneys and lardaceous change in several other organs. Such facts led him to question if the disease be not always primarily lardaceous.—Dr. N. MOORE was sure that in acquired syphilis the disease of the kidney was not always lardaceous; in a woman who had undoubted evidence of syphilis, the kidneys were found to be very granular, with puckered scars across them, but no lardaceous change could be detected in them.—Dr. BARLOW stated that in the case he had referred to there was no lardaceous change; there was very often a fibrous change in the liver and spleen, without lardaceous degeneration.—Dr. MAHOMED asked if Drs. Barlow and Moore had examined the kidneys microscopically, as the change could often only be detected by that means.—Dr. BARLOW and Dr. MOORE stated that they had made a microscopic examination.—The PRESIDENT stated that in the case he had mentioned there had been no microscopical examination, but he had Dr. Sutton's authority for stating that there was no lardaceous change. The case presented one peculiar feature; the liver would swell to twice its normal size, and then after treatment subside. This occurred two or three times, the man being very ill on each occasion; he had also albuminuria, and repeated attacks of hæmaturia. The liver was afterwards proved to be not enlarged, and the only change was patches of thickening of the capsule.—Dr. COUPLAND stated that in his cases the change in the kidneys was mainly epithelial and not lardaceous; the spleen was also large, firm, and glistening, but neither it nor the liver was lardaceous. All these organs were examined microscopically.

Dr. LEES showed a specimen of Malformation of the Heart with transposition of Aorta and Pulmonary Artery, taken from a child aged seven months, that was brought to him at the Hospital for Sick Children when four months old. The mother stated that it had been blue from birth, especially in the head and upper limbs, and had been very short of breath. The cyanosis of head and arms was very deep; there was no clubbing of the fingers. The pulse was over 160; second sound strongly accentuated, and there was no bruit. This fact was repeatedly verified by Drs. Barlow and Garlick and himself. Two months later a systolic bruit was detected at the left base, conducted up to the left clavicle, and audible in the upper part of the interscapular region; this was occasionally heard at the apex, and continued till death. At the autopsy two vessels lying parallel were found to spring from the base of the heart; the one on the right, the smaller, was the aorta springing from the right ventricle, giving off the two coronary, innominate, and left carotid and subclavian branches, and then being very much narrowed. The larger vessel on the left was the pulmonary artery, which sprang from the left ventricle, gave off the two branches to the lungs and the ductus arteriosus, which was patent, and joined the narrowed aorta to form the descending aorta. Both auricles were normal, and the foramen ovale was practically closed; the walls of the two ventricles were of equal thickness, and in the septum between them was an aperture as large as a common cedar pencil. All the valves were normal, with the exception of a slight thickening of the mitral valve. Thus the head and arms had been supplied with venous blood, and the trunk and legs with partially aerated blood, the quantity from the aorta and ductus arteriosus being about equal. The dyspnœa was probably caused by the circulation of venous blood in the respiratory centre in the medulla oblongata. When the mother of the child was about six weeks advanced in her pregnancy she received a severe mental shock while bathing, the effect of which upon her abdominal nervous system was evidenced by vomiting and diarrhœa; this was the period when the septum of the ventricles was being developed. The events were synchronous; might they not be cause and effect? She had also previously had one of a twin birth stillborn and deformed—having no nose but one large central cloaca,—which the mother attributed to her having met a woman who had lost her nose and upper lip from lupus. This case was important as throwing great light upon the cause of the marked cyanosis of congenital malformations of the heart; it was evidently not due to venous congestion, and there was abundant evidence to prove that it was not the result of simple intermingling of arterial and venous blood.—Dr. LEES thought that cyanosis was only met with where there was an imperfect aeration of the blood, as must have been the case here where the same stream of blood was con-

stantly circulating through the lungs with but little chance of mingling with and purifying the main bulk of that fluid. Although the cyanosis was intense, there was no clubbing of the fingers or toes, which it was reasonable to connect with the absence of congestion of the venous system. Dr. Peacock's cases showed that where there was great obstruction to the passage of blood through the right auricle the clubbing was marked; but where a patent foramen ovale removed the obstruction clubbing was little if at all marked. Cases recorded by Dr. Pye-Smith and Dr. Crocker also supported the view that clubbing is due to systemic venous congestion.—Dr. N. MOORE thought the fright had nothing whatever to do with the deformity of the heart; the mother had brought forth another deformed child, and had had twins, which Dr. Matthews Duncan had shown to be one form of blight; it therefore seemed to be a clear case of imperfect development of ova.

Mr. EVE showed a specimen of Dislocation forwards of the first Phalanx of the Thumb, removed from a man who was killed by the fall of an archway upon him. The bone of the phalanx rested on the front of the metacarpal bone, the back of the capsule being torn; it could be readily reduced by flexion. Hamilton mentioned ten cases of this injury, two seen by himself; a similar case was recorded by Mr. Wood, in vol. iv. of the Society's Transactions.

Dr. SAUNDBY (Birmingham) showed several drawings illustrating his views on the Pathology of Granular Contracted Kidney. He stated that, after a long and careful study of the subject, he had given up the theory of interstitial nephritis, in favour of the views of Drs. Johnson and Moxon, that it is a parenchymatous change. He referred to his own and other observations on the changes in the epithelium in cirrhosis of the liver, by which it had been shown that, side by side with the fibroid change, the hepatic cells become replaced by smaller epithelial elements. He believed that a similar change occurred in the kidney. The epithelial cells atrophied, lost their opacity, the protoplasm diminished, and the nuclei took on a deep staining with carmine; the tubules became filled with these small round cells; these cells then became spindle-shaped, and later on developed into fibrous tissue—a change which had been noticed before. The Malpighian bodies underwent what he would call an "embryonic transformation," being converted into little masses of granulation tissue, which became mucous, and later on formed a cyst with homogeneous contents; and thus arose most, if not all, of the common renal cysts. He had found the arteries to show undoubted fibroid thickening of the intima and adventitia, but also great hypertrophy of the muscular coat. This hypertrophy he considerd to be the effect of the long-continued congestion of the organ, which was the initial change occasioned by the fact that upon the kidneys was thrown the main part of the depuration of the blood.—Dr. GREENFIELD was glad attention had been called to such an important subject, but thought it would be unfair to discuss it while only Dr. Saundby's drawings were before them. Such a complex organ as the kidney was probably affected with more than one form of disease, and certainly his own investigations had led him to a different conclusion from that arrived at by Dr. Saundby. He thought it would be well if Dr. Saundby would bring up the subject on another occasion, and exhibit his specimens.—Dr. MAHOMED supported Dr. Greenfield's proposal. He was doubtful if the epithelium wandered through the basement membrane, and then changed into connective tissue.—At the request of the President, Dr. Saundby promised to exhibit his specimens and give a fuller account of his views at another meeting of the Society.

Dr. PYE-SMITH showed a specimen of Membranous Laryngitis in an adult. A woman aged twenty-three was suddenly attacked on Dec. 25th with shivering, vomiting, and cough, being very ill. The next day she brought up some false membrane, and the following day a large arborescent cast of the trachea and bronchial tubes, which he exhibited. He saw her on Dec. 29th. There was then great dyspnœa, moderate fever, no membrane to be seen on the fauces. The next day she was delivered of a child prematurely without the loss of much blood. The dyspnœa increased, and, after a week's illness, she died. After death the fauces and larynx were found to be healthy, but the whole of the larynx, trachea, and bronchial tubes were inflamed, but showed hardly a trace of false membrane. The expectorated cast resembled those met with in plastic bronchitis; but its fatal issue, the absence of hæmorrhage, and the affection of the larynx and trachea, showed that this was not a case of plastic bronchitis. He thought there were serious objections to calling it diphtheria:—1st. It was a sporadic case. There were no other cases of diphtheria, typhoid, or scarlet fever in the neighbourhood, nor was there any local source of the poison found. 2nd. The absence of the characteristic sign of diphtheria, asthenia; it was acute asphyxia, like that seen in croup in children. 3rd. No affection of fauces; no swelling of neck or cervical glands. 4th. No signs of a general blood disease found post mortem; the blood was firmly coagulated; no swelling or ecchymosis of spleen, or staining of vessels. 5th. Kidneys were healthy, and there was no albuminuria. It seemed to him to come as near as possible to a case of non-diphtheritic membranous inflammation of the larynx and trachea.—Dr. SEMPLE considered the case to be really diphtheria; the membrane had been coughed up, and was therefore not found after death; it was well known that sporadic cases of diphtheria occur, and also cases in which the fauces are unaffected.—The PRESIDENT asked if there were any evidence of the contagiousness of this case.—Dr. SHADWELL, in whose practice the case occurred, stated that there was no sore-throat about at the time nor after, and no evidence of its contagiousness.

Dr. N. MOORE showed a recent specimen of a Morbid Growth in the Lung, probably cancerous, which surrounded the root of the right lung, penetrated the right auricle, one pulmonary vein, and completely filled up the left auricle. The signs during life were those of bronchitis and emphysema.

The specimens shown by card were:—(1) Æsophagus and Stomach, from a case of Acute Carbolic-acid Poisoning; by Dr. Robert Smith. (2) Fracture of the Clavicle, with Dislocation of the Acromial End upwards; by Mr. Eve. (3) Drawings of Epithelioma; by Mr. Hulke. (4) Two complete Ureters on either side of the Body. (5) Congenital Malposition and Cystic Degeneration of the Left Kidney. (6) Mucous Membrane of the Bladder, showing Miliary Tubercle in the absence of Tubercle elsewhere. (7) Fibroid and Calcareous Changes in both Suprarenal Capsules, perhaps of Syphilitic origin; all by Dr. W. Ewart. In reference to the last specimen, Dr. EWART stated that it was taken from the body of a woman aged thirty-seven, who died from scarlet fever and parenchymatous nephritis, who had not shown any symptoms of Addison's disease. There was no evidence of struma or tubercle; but on the inner table of the skull was a depression like the result of a node.

The Society then adjourned.

MEDICAL SOCIETY OF LONDON.

Tumours of the Cerebellum.—The value of Parallelism in the Treatment of Disease and Injuries of the Hip.

AT the meeting on the 12th inst.—Dr. Cockle, President, in the chair—a paper was read by Dr. HUGHLINGS JACKSON, on Tumours of the Cerebellum (which is published *in extenso* in another column.) In thanking the author, the PRESIDENT remarked that he had seen three or four cases of tumour in the cerebellum, in which death had taken place suddenly.—Dr. DOWSE inquired whether sensation or hearing were affected in the author's cases; and also whether perfect co-ordinating power was retained in the recumbent posture.—Dr. SYMES THOMPSON referred to a case of long-standing otorrhœa (ten or fifteen years) which terminated suddenly, the man dying from an abscess involving almost one hemisphere of the cerebellum. The petrous bone was much diseased. In such cases the optic disc should be examined.—Dr. H. JACKSON, in reply, said that he had not noticed defect of hearing in cases of cerebellar disease; as to co-ordination, there was reeling gait in the cases he had seen. Optic neuritis was always present in cases of abscess of the brain.

Mr. BRYANT read a paper on the value of Parallelism of the Lower Extremities in the Treatment of Hip-disease and Hip-injuries, with the best means of maintaining it. The author first pointed out how it was that in most of the deformities of the lower extremity following a natural recovery with a stiff joint after hip disease or injury, the deformity was due to a want of parallelism of the lower extremities, and then passed on to demonstrate, by means of

a simple instrument he had constructed for the purpose, that, as a rule, in such cases the deformity is produced by the *ad*duction of the affected limb. He conclusively demonstrated that when the hip-joint is fixed in an *ad*ducted position, and the patient attempts, for walking purposes, to bring the limb vertically downwards, the pelvis on the affected side is tilted upwards, and on the sound side downwards, with the result of increasing the shortening of the affected limb. On the other hand, when the anchylosed limb is *ab*ducted and the foot is brought down for the purposes of progression, the pelvic line on the diseased side is lowered, and the affected limb is merely apparently elongated; apparent lengthening of the diseased limb in hip disease meaning its *ab*duction and apparent shortening its *ad*duction. Under these circumstances it is clear that only by maintaining parallelism of the two limbs in such cases can deformity be prevented. For this purpose the use of the double splint, which he has had slowly built up under his eye at Guy's, was strongly recommended, for he maintained (1) that it is far more comfortable to the wearer than any other he had used or seen used; (2) that it most thoroughly immobilises the limb to which it is applied; (3) it keeps up well-regulated, steady and persistent elastic extension; and (4) maintains absolute parallelism of the lower extremities. In children with acute hip disease, the splint, when well applied, so securely guards against joint movement that the nurse may turn the child over on to the sound side for purposes of cleanliness, and lift him for the performance of the natural functions, with freedom and confidence. In cases of fracture of the neck of the femur or shaft, the same principle is applicable and the same splint of value; in proof of which the author stated that thirty consecutive cases of fracture of the neck of the thigh-bone, occurring in patients averaging seventy-four years of age, left his wards with useful limbs; and that out of forty consecutive cases of fracture of the shaft of the femur, in only four, or one in ten, was there any important shortening, such as an inch. In twenty of the remainder there was no shortening, and in eighteen there was less than half an inch.—Mr. MASON thought the splint a useful one. At St. Thomas's Hospital they were now using Hamilton's splint in three cases.—Mr. ROYES BELL said that most surgeons were now agreed that parallelism was most desirable in these cases. At King's College Hospital they now used the American splint and weight.—Mr. PEARCE GOULD could not agree that the legs are normally parallel. They are abducted.—Mr. BRYANT, in reply, said that the subject of parallelism had been much neglected. He had seen many cases of hip disease which had been treated by the weight and splint result in considerable deformity, due either to abduction or adduction. In the splint suggested by Mr. De Morgan, from which his (Mr. Bryant's) was built up, parallelism was secured. In adults normally there might be abduction, but in children there is parallelism of the limbs. No force should be used in extending a flexed joint. Mr. Marsh's paper on this subject was of great value, but Mr. Marsh in his cases gained his end by means of the American splint.

Mr. G. C. COLES exhibited the Laryngo-Phantom devised by Dr. Isenschmid, of Munich, intended to familiarise the student and practitioner with the use of the laryngoscope, enabling the various conditions to be learnt without the loss of time involved in observations on the living subject. The apparatus is sold by Messrs. Kröhne and Sesemann.

OBSTETRICAL SOCIETY OF LONDON.

AT the meeting on Jan. 14th—Dr. Playfair, President, in the chair—specimens were shown by Dr. Godson, Dr. Hilliard, and Mr. Clabburn.

A paper on "The Pain in Pelvic Cancer, and its relief by Morphia," by Dr. CHAMPNEYS, was read. The former and larger part of the paper consisted of a clinical study of fifty cases in the wards of St. Bartholomew's Hospital, and was illustrated by fourteen tables, dealing with the ages of the patients, the first symptoms noticed, the seat of pain, its locality, the date of its commencement, its quality, amount of intensity, and the relation of pain to hæmorrhage. The analysis showed some points of departure from what have been considered established facts; for instance, as many of the patients were from thirty to forty years of age as were from forty to fifty; and again, pain rather than hæmorrhage was the first symptom noticed. On these the author remarks that his cases were only fifty, and can therefore not overthrow Dr. West's larger number of 166, but suggests that as this part of the question cannot be founded on objective facts, but must depend on the patient's memory, which memory might be supposed to retain hæmorrhage rather than pain, it may be supposed that pain, as a first symptom, may occur oftener than is usually imagined. It was shown that cancer may be painless at almost every stage, but it was remarked that of the author's cases none were painless in which hæmorrhage was absent. The seat of pain was carefully ascertained by making the patient lay her hand or finger on the spot. The localities were most various, the region of prevalence of uterine pains being seen, however, to be mainly bounded by the line of the sacrum above and of the knee below. It is remarkable that the pains were six times as common on the left as on the right side, which cannot depend on the locality of the disease, but must depend on the difference with regard to sensation between the two halves of the body, a difference seen also in the common left-sided pain of females and the preponderance of left-sided hemi-anæsthesia; "Man is not an absolutely bilaterally symmetrical animal." Aching of the whole front of the thighs and pain transfixing the body are believed by the author to be at least uncommon except in cancer. Backache amounted to 24 per cent., pain in lower abdomen to 14 per cent., pain in the groins to 18 per cent., of all pains. It was shown that no relation existed between intensity of pain and duration of disease. Thirty cases showed the pain to be worse post-meridian than ante-meridian. The author suggested a connexion between pain worse at night and pain relieved by bleeding as possibly depending on the increase or diminution of vascular tension in the diseased tissues, which is illustrated by the nocturnal tightening of bandages, and he remarked that in all his painless cases there was bleeding. Three remarkable cases are given at length of nervous affection, in one of which there was paroxysmal nocturnal motor and vaso-motor disturbance of one, then of both legs, depending probably on irritation reflected at the spinal cord. Of the methods of administering morphia the hypodermic injection was shown to be by far the most, and the suppository the least, effectual.—Dr. MATTHEWS DUNCAN thought the paper was one for reference rather than criticism. The collection of facts was great and valuable, and never before made. The connexion of physical signs with lesions was easier than symptoms with them.—Dr. HEWITT said the paper showed great research. He had paid particular attention to the pain of cancer. Its peculiarity was its spontaneity. He had also observed increased frequency of pulse in cancer.—The PRESIDENT was struck with the frequency with which pain was present. He asked if measures for removal had had any effect in alleviating the suffering.—Dr. GODSON had found hæmorrhage frequently the first symptom.

A paper on Cotton-leaf Tea as a Galactagogue, by Dr. ANDERSON, of Jamaica, was read. It was in common use among the natives. He had used it, and thought it efficacious up to the fourth month of delivery.

Dr. CARTER and Dr. DALY described the removal of a foreign body from vagina after four years. After removal, the vagina contracted; it was dilated. The patient married and became pregnant; labour was induced at the eighth month, but the cicatricial tissue in vagina obstructed the head. The band was divided, and delivery soon accomplished.

A case of large foreign body in vagina for two years, perforating the posterior walls of the bladder, and its removal and closure of the fistulous opening, was read by Dr. CARTER.

WEST KENT MEDICO-CHIRURGICAL SOCIETY.

THE third meeting of the present session of this Society was held at the Royal Kent Dispensary, Greenwich, on Dec. 5th, 1879, Mr. J. P. Purvis, President, in the chair, when Mr. F. B. JESSETT, F.R.C.S.E., of Erith, read a paper on "Fractures, their Pathology and Treatment." After going fully into the pathology of fractures, the author discussed at length the various modes of treatment, especially urging the early application of fixed splints in all simple fractures of the long bones, plaster-of-Paris and starch

bandages being especially recommended; and in the treatment of compound fractures he also recommended the same line of treatment, with trap-doors cut over the wounds for dressing.

Reviews and Notices of Books.

Clinical Lectures on the Diseases of Women. By J. MATTHEWS DUNCAN, M.D. J. and A. Churchill.

WE have read this book with a great deal of pleasure. It is full of good things. To derive the maximum of profit from its perusal, however, the reader should have some personal knowledge of the author, for he has impressed his own individuality upon his work. The book consists of nineteen short lectures or sketches, of varying degrees of merit, but all good. The subjects of some of the lectures are symptoms, as painful sitting, aching kidneys; of others, definite diseases, as cancer of the body of the uterus, fibrous tumour, &c. The style is fresh, clear, and striking. Of course the subject is in no instance fully treated. Clinical lectures are always in one sense fragments, while in another they may be integers. The papers before us are of this character. The hints on pathology and treatment scattered through the book are sound, trustworthy, and of great value. A healthy scepticism, a large experience, and a clear judgment, are everywhere manifest. Instead of bristling with advice of doubtful value and unsound character, the book is in every respect a safe guide. There are some things in it with which we do not agree; yet these errors, if they be such, have a harmless, if not a beneficial tendency, for they are "errors on the right side." We have but one fault to find with the book: it is too short. It is suitable to the advanced student, rather than to the beginner in gynæcology.

Traité Élémentaire d'Analyse Qualitative des Matières Minérales. Par ALFRED DITTE, Professeur à la Faculté des Sciences de Caen. pp. 364. Paris: Dunod. 1879.

So many text-books of elementary chemical analysis have appeared of late years, some of them excellent in nearly all respects, that a new one must show remarkable advantages to induce teachers to adopt it. A careful examination of M. Ditte's work has convinced us that it has a distinct *locus standi*; that it is not a mere repetition of old systems, but a work of originality, even though the older methods have been in the great majority of cases retained. We do not mean that we approve of all the changes that have been introduced. Here and there one strikes us as the reverse of an improvement, but on the whole the methods recommended are well chosen, and the arrangement of the book is so clear and the descriptions so simple that a student will be able to get on with comfort and without unnecessary delay.

In the earlier portion of the book, the chapter we like best is that on the identification of acids in simple salts and mixtures. Students generally find far more difficulty with acids than bases, especially when more than one acid radical may be present. The acid groups are not very sharply defined, and the members sometimes rather hard to separate. There are so many special tests, and the metals so often interfere with the reactions, that this student's difficulty is not surprising. Now, the analytical scheme adopted by M. Ditte for the separation of acids is decidedly simpler than most others that we have seen, and will certainly for this reason be a boon to students. We think, however, that the omission of sulphuric acid as a general indicating test for acid radicals is a mistake. It can be applied very quickly, and in a large number of cases gives a simple and obvious indication.

A long section devoted to the methods required for special cases, such as the ashes of plants, silicious mineral, &c., is very satisfactory, and will afford excellent practice to the more advanced student. The same may be said of the last book, which is devoted to a practical as well as theoretical account of spectrum analysis, and, indeed, in varying degrees to all portions of the work.

We regret that the author should have made so little use of symbols, which, indeed, are almost absent. This is a very grave defect, for although, of course, a diligent student may supply this want for himself, many reactions are hardly comprehensible without them. But, after all, as the old atomic weights, now almost forgotten in England, are employed, a greater profusion of formulæ might have been a doubtful blessing.

We must add that the work is admirably got up and illustrated. It is accompanied by a series of tables of the spectra of metals and non-metals, most beautifully executed, and of the highest value for purposes of study.

OUR LIBRARY TABLE.

The Quarterly Journal of Microscopical Science. Edited by Messrs. LANKESTER, ARCHER, BALFOUR, and KLEIN. No. 77. January, 1880.—This number contains several valuable papers, and is illustrated by seven plates. Mr. H. Ward supplies an article on the Embryo Sac and Development of Gymnadenia conopsea, one of the commoner orchids of Europe. It is not possible to abstract the details, but they are evidently the result of much patient research. The same may be said of F. Elfving's studies on the pollen bodies of the Angiosperms, made at the Jenäische Institute with Professor Strasburger's co-operation, and translated from the *Jenäische Zeitschrift*. Mr. Bower gives the Development of the Conceptacle in the Fucaceæ. Dr. Cunningham, of the Indian Medical Service, writes on certain effects of Starvation on Vegetable and Animal Tissues. By placing germinating spores in distilled water, he finds that the primary effect of starvation on vegetable tissues consists in a gradual analysis of the complex amalgam constituting the protoplasm, and of a precipitation of the oily matter from it. This is followed by transformation affecting the albuminoid constituents, and leading to their more or less complete conversion into fat. The effect of starvation on animal tissues was found, in accordance with previous observations, to be of essentially the same nature. Dr. Cunningham's Indian experience enables him to give the results of numerous autopsies made on the victims of famine in Madras. The coats of the intestine, in particular, were found to have undergone fatty degeneration, the epithelium to have disappeared, and the general condition of the alimentary canal to be unfavourable for the digestion, absorption, and assimilation of food. He draws some important conclusions from these premisses in reference to the establishment of relief camps in cases of famine. One of the most important articles is that by J. E. Bloomfield, of Oxford, upon the Development of the Spermatozoa in the Lumbricus. He applies the term spermatospore (parallel to oospore, denoting the ovarian egg-cell) to the constituent cells of the testis derived from the primitive germ epithelium. These, by division of their nuclei, form spermatospores, or sperm-polyplasts. Each constituent of a sperm-polyplast is a spermatoblast, and when the process of division is over each spermatoblast becomes a spermatozoon. Mr. Balfour has a note on the Spinal Nerves of Amphioxus. Lastly, M. G. Armaner Hansen has a paper on the Bacillus of Leprosy.

The Journal of Anatomy and Physiology. Conducted by Professors HUMPHRY, TURNER, MCKENDRICK, and CREIGHTON. Vol. XIV., Part 2. Jan. 3rd, 1880.—This part contains:—1. An account of the Intrinsic Muscles of the Marsupial Hand, by Alfred H. Young, of Owens College, the animals examined being the opossum, the wallaby,

the yellow-footed rock kangaroo, the wombat, and the koala. Mr. Young agrees with Dr. Cunningham in admitting a plantar layer of adductors, an intermediate layer of short flexors, and a dorsal layer of abductors. This paper is accompanied by a plate. 2. Mr. Young also contributes a paper on the Myology of the Viverra Civetta. 3. Dr. Roger Williams gives a note on the Anatomy of the Knee-joint, chiefly bearing on the bursæ about the patella, and the expansion of the quadriceps extensor femoris. 4. Dr. D. J. Hamilton describes the development of fibrous tissue from the hepatic parenchyma in Cirrhosis of the Liver. The appearances are illustrated by a carefully made drawing. 5. Mr. McBride supplies a contribution to the pathology of the Internal Ear, showing in a plate and accompanying description the changes taking place in a recent case of croupous inflammation of the cochlea, and an abnormal condition of the semicircular canals. 6. Dr. Beatson, of Edinburgh, describes the disease called Sturdy in Sheep, and its relation to cerebral localisation. This is well known to result from the development of an hydatid, the Cœnurus cerebralis, in the brain of the sheep, this being the larval stage of the Tænia cœnurus of the dog. One case he records favours the view that the cerebellum is the co-ordinator of muscular movements. In a second there was gradual disappearance of the corpus striatum without loss of motor power, and he was led to think that when vertiginous movement is present there is some interference with vision on the opposite side of the body; when both eyes are affected the vertiginous movements cease. 7. Dr. James Carmichael gives two cases of Lesion of the Temporo-sphenoidal Lobe of the Brain. 8. Dr. W. Osler records two cases of striated Myo-sarcoma of the Kidney. 9. Dr. George Gibson has an interesting paper, with tracings, on the Sequence and Duration of the Cardiac Movements. 10. Professor Turner gives two short communications, one on the Fœtal Membranes of the Eland, and the other on the Dissection of a Second Negro. Lastly, Dr. Anderson describes a new abnormality in connexion with the vertebral artery.

The Birmingham Medical Review, January, 1880.—Among the contents of the present number is a thoughtful review by Dr. Saundby on some recent contributions to the question of the relation between kidney disease and hypertrophy of the heart, and other reviews on medical ophthalmoscopy, psychological medicine, glaucoma, &c. The original contributions include articles by Eales on the Retina in Bright's Disease; Lawson Tait on Cirrhosis of the Ovary; McMann on the Spectroscope; and Handford on Hereditary Deformity. The editor would do well to look out for verbal and literal errors in his contributors' papers rather more carefully than has been the case in this number.

The Practitioner, January, 1880.—Dr. Hunter Mackenzie discusses the question, Is Aconite a diuretic? and concludes that it is not. Mr. Gamgee contributes a clinical note on Pressure. Dr. Dyce Duckworth discusses the effects of Tight-lacing. Dr. D. J. Hamilton considers, in a valuable paper, the subject of Catarrhal Pneumonia and Tubercle. Dr. W. Nicholson vindicates Alkalies from their supposed depressing effects; and Mr. Martindale describes the Pharmacy of Nitro-glycerine.

The Irish Medical Directory for 1880 admirably fulfils its purpose as a register of the profession in the sister isle, and will be appreciated as a useful adjunct to the works of reference usually kept on the book table.

Popular Science Review. Edited by W. S. DALLAS. January, 1880.—This number contains four original articles: 1. Notes on the Argentine Republic, by Charles Oxland. 2. Meteor and Meteor Systems, by W. F. Dunning. 3. The Law of Association in the Animal Kingdom, by M. E. Perrier. 4. The Dinosauria, by Professor H. G. Seeley. In the article on the Law of Association, M. Perrier, commencing with the hydraform polypes, shows how the division of labour, ultimately ending in transformation and separation, occurs in them, and how even the highest animal may be regarded as a colony of separate and independently acting parts.

New Inventions.

THE BOWER PATENT SEWER-GAS TRAP.

THIS invention is brought forward by Messrs. J. Warner and Sons, of the Crescent Foundry, Cripplegate. It is applicable to sinks, and to the overflow pipes of water-closets and the waste and overflow pipes of baths. The house end of the trap opens into a glass or leaden dome having its convexity downwards, the diameter of the dome being about double that of the house-pipe. The sewer-pipe leaves the domed chamber at its upper part, and sufficiently above the level of the end of the house-pipe to ensure the interposition of a good stratum of water between it and the sewer-pipe. The dome or bell contains an india-rubber ball, which is floated upwards by the water, and closes the lower end of the house-pipe effectually. The greater the pressure in the sewer-pipe or the bell, the greater is the pressure on the ball, and the more securely is the house-pipe sealed against regurgitating gases. The bell part, being of glass, permits of an easy inspection of the trap, and, being removable, allows of repairs and interference if necessary. The action of the ball, when pushed about by the down-rushing current from the house-pipe, is such that it stirs up all deposits in the bell and prevents any accumulation. In addition to these advantages, it is claimed for this trap that it can be unsealed neither by syphonage nor evaporation, that the compression of the india-rubber valve compensates for the expansion from freezing, and that the valve can be easily renewed by anyone, and at a small cost. The invention seems to us to be an admirable one, and is well worthy the attention of sanitarians.

BOSTEL'S PATENT "EXCELSIOR" WATERCLOSET.

THOSE who have visited the Parkes Museum, and have seen the collection of corroded leaden pipes and traps, and the defective plumbers' work, which are there exhibited, must have been impressed with the desirability of avoiding the use of lead in the construction of waterclosets. This closet of Bostel's is constructed in one piece of earthenware, and its simplicity is one of its best points. The bottom of the basin is sufficiently concave to hold a small quantity of water to receive the soil. The outlet pipe makes an S bend beneath the basin, and thus provides a trap. The basin has a flushing rim; and the soil-pipe is provided with a ventilating pipe and a movable cap, which allows of the ready introduction of a plumber's plunger in case of any obstruction occurring in the trap. The closet is a great improvement on those too complicated arrangements which seem especially designed to stimulate the passage of money from the pockets of householders to those of plumbers and sanitary engineers. We may state that a specimen of this closet has been deposited by the inventor (Mr. Bostel, of Brighton, and Golden-lane, E.C.) in the Parkes Museum of Hygiene, where it may be inspected.

MEDICAL SOCIETY OF LIVERPOOL.—The following gentlemen have been elected office-bearers for the ensuing year:—President: Mr. Reginald Harrison. Vice-Presidents: Mr. Newton, Mr. Puzey, Dr. Caton, Dr. Dickinson. Treasurer: Dr. Campbell. Honorary Secretaries: Mr. Rushton Parker, Mr. Edgar Browne. Librarian: Dr. Howie. Council: Drs. Davidson, Graham, D. Williams, Townson, Waters, Barr, Rawdon, Messrs. Warburton, Banks, Ransford.

THE LANCET.

LONDON: SATURDAY, JANUARY 24, 1880.

THE time of the remaining Parliament is short. The Government fails to see that in regard to the domestic sphere of legislation, it has but a poor account to give. There is, however, possibly, another session before it, in which it may show its capacity for dealing with subjects that deeply affect the happiness and the welfare of the people of the United Kingdom. There may be something to be said for the foreign policy of the present Ministry. But no Ministry can long remain in reputation which has not a domestic policy, and which has little success in abating social misery, and in adding to the security of life, property, and virtue in the community. Mr. CROSS gave promise from the first, in his sphere, that these great functions of the Government would not be unfulfilled. There is an obvious honesty of purpose and expression in him, that makes men of all parties hope for much from him. But it must be confessed that up to this time Mr. CROSS has not satisfied expectations that were so general and so independent of party. His enunciation of sensible views and intentions has not been accompanied with the production of measures that have succeeded in bringing about the effects which we have indicated above, and which ought to some extent to be within the power of every Ministry. We do not know any member of the Government who has a deeper interest in the work of the coming session than Mr. CROSS. Lord BEACONSFIELD's reputation is that of genius, and is pretty well established. His talent and his power are absorbed in questions that lie far outside of the immediate affairs and interests of the people of these realms. Africa, Turkey, Asia Minor, Afghanistan, and India are the wide regions in which his genius finds scope and employment. But there is a domestic region in which the views and interests of millions have to be consulted, and we must regard the Home Secretary as representing that part of the Government which takes notice of these. Genius is a grand quality, but it will not do much in the details of home legislation. Here more is to be expected from good sense and honest purpose. These are all well enough represented in the present Government. And the time has fully come when they should have a chance of asserting themselves. A demand, even an urgency, is admitted on all sides. And it is allowed that this Parliament will go discredited into history, and the Ministry hopelessly to the country, if something is not done in the home sphere of statesmanship. We have had enough of politics; we want a little statesmanship, and legislation that will make homes happier and the maintenance of families easier.

There are some medical questions that affect deeply both the health of the people and the credit of the Ministry. One of the most urgent of these is the Medical Bill, or Bills, now under the consideration of a Select Committee. We shall not here go into any details as to the position of these Bills. Speaking roughly, they affect the education and the efficiency of the medical profession. If the Ministry is in earnest, and will encourage the Committee in its work, it may do a huge service to the public.

The Prevalence of Epidemic Diseases (some of them absolutely preventable) on a large scale, and of other avoidable diseases on a more limited scale, might well engage a few of the last hours of a Parliament that was summoned to the cry of *Sanitas sanitatum, omnia sanitas.* Asylums that were built for the reception of one kind of zymotic sickness are filled by another; and those meant for one class are monopolised by a different one. Vestrydom has entirely failed—in the metropolis at least—as a power to cope with epidemics; and the Act of the Government, prepared last year, is a mere postponement and evasion of the duty to make more serious provision for the protection of the public.

The law affecting Coroners' Inquests can scarcely remain as at present. Some uncalled-for inquests are held, and a great many inquests that are called for are held in a perfunctory and formal way, that throws no light on the cause of death, and in no way increases reverence for human life. A Select Committee has already reported in favour of important changes. With considerable boldness, it is argued that none but lawyers should be eligible for the office of coroner, though it is admitted that the men who have kept alive in the public mind the power and use of the office have been of the medical profession. Some *amende* is made for the audacity of this proposal by providing for the presence and assistance of experts in the holding of inquests. But this provision will have to be well safeguarded if any improvement in the present style of holding inquests is to be effected.

The Ministry, if accounts be true, will have to face a debate on the appointment of Sir BRYDGES HENNIKER as Registrar-General, and on the non-appointment of Dr. FARR, who, more than any living man, has breathed the breath of life into the dead figures of vital statistics, and invested them with a significance that is now studied by all civilised nations. When a Government acts as the Ministry have done in this case, it inflicts a serious blow and great discouragement on the whole Civil Service.

The subject of the Water-supply of London has already called forth a spirited expression of determination on the part of Mr. CROSS to buy up the interests of the Water Companies on reasonable terms. It would be a feat of statesmanship to take the metropolitan water-supply out of the region of commercial interest, and make it, in affluence and in purity, as near as possible like the supply of air or light. The latest reports throw doubt on Mr. CROSS being able to carry out his resolution to buy at a reasonable price. We must give him the benefit of the doubt, but it will be discreditable if he does not.

Lunacy law reform, in a rational, but sufficiently bold sense, is, it must be assumed, at this moment a matter of serious consideration. The question at issue is grave and pressing.

We can only notice one subject more in which the credit of the Government, and of Mr. CROSS in particular, is concerned. We refer to the expected legislation on the basis of the Report of the Lords' Committee on Intemperance. We cannot doubt that Mr. CROSS has long since regretted his concession to the public-house interest in

relaxing most seriously the legislation of the previous Government, which, by the universal testimony of magistrates and police, was doing great good. Be this as it may, the Lords' Committee have made important suggestions which must be regarded, and public opinion is even more urgent than the Lords' Committee.

With such questions to settle, the Ministry has opportunities of placing itself in a better position before the country and posterity than it will occupy if they are evaded or lightly treated.

DR. REID, the new Director-General of the Medical Department of the Navy, has our warm sympathies in the difficult task awaiting him, and we shall rejoice greatly if he succeed in restoring the Service to somewhat of its old prestige. We hear most favourable reports of him, but we cannot forget that he has Herculean labours to perform. We sincerely hope that he may receive loyal and unflinching support from the officers of the Department, and from those who have placed him in his present position. But whilst we congratulate the First Lord and the Department upon the appointment, we deem it our duty to add a few words of caution. We would point out, first, the necessity for the issue of a new Warrant before the date of the next examination. If this be not done, the attempt to obtain a supply of candidates must prove a failure. Mr. W. H. SMITH is too much of a man of business to expect to get good men, or even a sufficient number of indifferent men, to come forward before the conditions of service are made known. The existing conditions are manifestly insufficient for the purpose, and in the present day men will not enter under vague promises or without a distinct and binding agreement. We would also caution him that a Warrant merely assimilating the pay to that of the army medical officers, under their new Warrant, will not be sufficient to restore the Department to popularity. There are other matters which require amendment. And the first of these is the honest enforcement of the rule laid down with regard to the choice of cabins. If medical officers are to be entitled to "have cabins according to their relative rank in the service," they must be protected from the injustice which, we regret to say, has too often been inflicted on them, of having the best cabins selected and marked for certain officers, while they come in for the choice only of those which remain. Let the conditions be laid down as to choice of cabins, and then let them be strictly adhered to, otherwise how can it be expected that officers will be satisfied? Another matter deserving serious consideration is the system of placing officers on half pay when a ship is paid off till they are appointed to another. Why should they not be sent to do duty in one of the naval hospitals, after a fair amount of leave, till their services are again required afloat? The principle of *continuous* service would remove one of the grievances of the Department. We would also venture a word of advice to the new Director-General. Kindness and courtesy are by no means incompatible with efficiency and discipline, and they go far to remove many of those smaller evils and discomforts which tend to make a service unpopular and its officers discontented. Above all, we counsel the avoidance of favouritism. If the best appointments are given to the best men, and the Director-General will fearlessly stand up for the rights of the officers of the Department over which he presides, he will have a fair chance of restoring the Naval Medical Service to the estimation in which it was at one time held in the profession, and securing for it an adequate supply of good candidates, and for himself the esteem and cordial support of all who take an interest in our navy. We cannot conclude without a word of caution to the younger members of the profession who are desirous of entering the Navy. Let them insist on the new Warrant being published before they go in for the competitive examination advertised for February. If they do not—if they come forward on the mere promise of a new Warrant and find afterwards that nothing is to be done to improve the service except an addition to the pay, they will have themselves to thank for it, and will meet with no sympathy either from the service or from the profession.

A VALUABLE contribution to our knowledge of the Bacteria suspended in ordinary air has been made by Dr. MIFLET, of Kiew, and appears in the just-issued part of COHN'S *Beiträge zur Biologie der Pflanzen*, the paper being prefaced by a few observations by COHN himself, who remarks that although many investigators since the time of EHRENBERG have alluded to the presence of the spores of fungi and other particles in the atmosphere, the credit of first calling the attention of scientific men to their importance in the production of fermentation and putrefaction belongs to PASTEUR, whilst special credit is due to DOUGLAS CUNNINGHAM and to BURDON-SANDERSON for their researches on this subject. It still remained doubtful, however, whether the minute bodies obtained by means of an aeroscope constitute the germs which develop into the bacteria found in putrefying solutions, or whether the infection or contagium was conveyed or developed from some impurity in the water. In MIGUEL'S researches, for instance, twenty litres of air per hour were transmitted through a plug of wool, and the particles contained in the air were retained on a plate moistened with a mixture of glycerine and glycose. The number varied from 500 to 120,000 per cubic metre of air. But these microbia or micro-germs were chiefly spores of fungi, and alga-pollen grains, fragments of tissue of different kinds, starch grains, and particles of silex, all of which are of comparatively small importance from a hygienic point of view, whilst no information was supplied as to the presence of bacteria-germs. In order to supply this deficiency, and to determine whether germs of the Schizomycetæ are really present in the air, COHN conceived the plan of drawing large volumes of air through fluids fitted for the nutrition, growth, and development of the germs in question, and employed for this purpose a very ingeniously constructed pump which permitted different specimens of the same air to pass through them without admixture. The nutritive fluids employed were, first, a mineral solution containing acid potassium phosphate, magnesium sulphate, neutral ammonium tartrate, calcium chloride, and distilled water; secondly, a 10 per cent. solution of extract of malt; and thirdly, a 10 per cent. solution of Liebig's extract of meat. It need hardly be said that all were thoroughly freed from any germs or spores that might have been present in them by exposure to steam

heat for one hour and a half, previous experiments showing that a shorter period was ineffective. Under these conditions the mineral nutritive fluid was adapted for the development of Bacterium termo alone, whilst the other two solutions were fitted for the development of all forms of bacteria. Having instituted some preliminary experiments, M. COHN and M. MIFLET set themselves to determine whether bacteria were present in the air, and whether they were discoverable or demonstrable bodies; and, secondly, whether they could be cultivated. The air transmitted through the nutritive fluids was drawn from localities as distinct as possible. Thus one set of experiments were conducted on air drawn from the rooms of the institute, another on the air of the botanic gardens, a third on that of the operating theatre, a fourth on that of the dead-house, and a fifth on the air of the typhus ward of the hospital. Taking these in succession, it appeared that the vessels through which the air of the rooms of the Physiological Institute was drawn showed the presence in moderate quantity of various kinds of bacillus and micrococcus, which soon caused cloudiness of the disinfected malt and flesh infusions. The mineral solution remained in all cases clear, nor did an increase or development take place when the mineral solution was inoculated with the meat or malt infusion containing the bacteria. As an incidental fact, it may be mentioned that some of the bacteria-holding infusion was injected into the veins of rabbits without being productive of any evil consequences. The air of the dissecting-room contained germs which quickly clouded both the mineral and the organic solutions, both malt and meat infusions presenting the same micrococci, and two mineral solutions the same bacilli, whilst the organic infusions also presented certain quite peculiar and distinctive forms, which are very beautifully delineated in a plate accompanying the paper. The results of the experiments on the free air of the operating theatre were that large micrococci of the same species were found in both the mineral and in the malt infusions, and twice also in the meat infusion, but in addition zoogloea-like micrococcus balls were found with an enigmatical ascococcus. The air of the botanic gardens constantly caused cloudiness of the organic infusions from bacilli, from the mycelium of the Rhizopus nigricans, and from the leptothrix. The inorganic solution remained perfectly clear. Some experiments were also made on air exhausted from the soil of the botanic garden; and it was found that whilst both the malt extract and the mineral solution remained clear, the flesh infusion contained entangled threads of torula-like bodies—that is to say, forms of micrococcus which arranged themselves in chaplets, and ascococci. A remarkable circumstance remains to be noticed. The experiments conducted on the air in the typhus ward of Wenzel's Hospital were all without result; neither the mineral solution nor the organic infusions exhibited the slightest turbidity. This M. MIFLET attributes to the thorough ventilation adopted in the wards, and the perfection of the methods of disinfection now in use. If this be correct, it speaks volumes in favour of the system employed, which deserves to be widely known and followed. As it has been said that, notwithstanding the accidents recorded in the daily papers, a seat in a first-class railway carriage is the safest place in the world, so it may prove, if bacteria are really the insidious fiends they are represented to be, that residence in a typhus-fever ward will secure immunity from disease.

"COMPARISONS are odious." We will not, therefore, attempt to recall the past to memory, or to point out, as it would be easy to do, the vast and increasing difference between those close relations which once bound Medicine to Letters and the slender ties that now connect these branches of applied knowledge. To some extent, doubtless, the change has been inevitable. As practical science develops, its technical growth must become more distinctive and isolating. The sum of the information to be acquired by the student and borne in mind by the practitioner is augmented, and individual attention is engrossed with the immediate business of life, without leaving time or energy for the intellectual pursuits in which scholarly members of our profession, even so recently as the early part of the present century, found relief and pastime. It cannot, however, be disguised that an intense spirit of *professionalism* has taken possession of the inner life of Medicine, as a vocation, in the course of the last thirty or forty years, probably with the death or retirement of the penultimate generation of medical men. Just as the surgeons of the army have sought better opportunity and increased honour in consolidation—another word for severance and class-distinction—the practitioners of Medicine, as a whole, have struggled, and in a signal way succeeded in the endeavour, to make the scientific enterprise of healing a craft, and those who are engaged in it a profession.

There are two sides to the result which has been achieved. Medicine *is* more than it ever was before a "vocation," but it is also less an integral part of science, and almost alienated from "Letters." The tendency of medical reform points to the widening of the breach which has been thus created. One by one the ties hitherto preserved by what are called discursive or "unpractical" branches of study are being severed, and instead of the idea betokened by the old practice of a university man "going out" in Divinity, Law, or Physic, we have that of specific education for the profession, with all the exclusiveness and "making to order" such a system implies. It is no longer a question what line of life a young man may choose, or for what he may be fitted, when he has completed his general education as a person of culture and refinement, but for what profession the stripling shall be *educated;* because, if he is "to be a 'doctor,'" a little Latin and less Greek will be requisite; while, as for literature or mathematics, these accessories are held to fall under the definition SCHLEIDER gave of specific botany—they are "either pastime or waste of time"; whereas, if the boy is to be a bishop *in posse*, or to train for a seat on the woolsack, he must go in for a more scholarly curriculum, and prepare for the business of life by learning to be a reader, thinker, and a talker of the type cultivated when professional qualifications were deemed to be secondary to the personal qualities required by a liberal education. What wonder that we do not find the physicians of to-day taking the same rank as "men of letters" as their predecessors of the last and the early part of the present centuries!

Never was there a time when the scientific attainments of professors of the medical art stood higher, or were more excellent in quality as well as range, than to-day; but it

will not be denied that at no period since Medicine has been recognised as a pursuit for men of culture has the class devoted to its study been so ill-represented in literature as now. Speaking broadly, there is scarcely a lingering regard for literature in place of the old love which the profession bore for the *alma mater* of the sciences in all their developments. We have conceded that the press and stress of technical work is too great to allow either students or practitioners scholarly leisure, but the fact is not the less to be regretted because it seems inevitable. Moreover, it is useful to note the true state of affairs, as it constitutes at least one reason why it is increasingly more difficult than in time gone by to make the influence of Medicine felt, and the views of medical men perceived, in circles where the older fashion of thought still holds sway. Everyone not himself wholly engrossed in business or exclusively professional in his habits of thought must have observed a serious diminution of respect for the *general* opinions of men—not only of our own, but of every other cloth—who show a tendency to exclusiveness. It must sometimes strike the reflective among us that we may carry to excess the policy of glorifying and enforcing at every turn and on all occasions the professional character. No class of men, be they ever so intellectual, can bear the strain of incessant concentration on business, and no bearing is so repellant as the purely professional. The clergyman, for special reasons—rightly, or perhaps wrongly interpreted,—goes about hall-marked, as it were. The doctor need not emulate the exclusiveness of the professor of divinity, but it would not be amiss if he strove to excel the clergyman's genius for versatility. Even the wearer of the long robe, as represented by the best specimens of his order, leaves his brief-bag with his wig at chambers. Unhappily the physician is "Doctor" everywhere; he is, in a sense, never off duty, and his very presence in society seems to be regarded as an incentive to conversation that drifts into consultation. If not professional, he is almost sure to be "scientific." The curious and, as we think, significantly suggestive circumstance, is that the Medicus in his lighter vein is rarely inclined, or perhaps we ought to say able, to pose as a man of letters!

Annotations.

"Ne quid nimis."

DEATH OF DR. E. C. SEATON.

WE greatly regret to have to announce the death of Dr. E. C. Seaton on the evening of the 21st inst. Our readers will remember that Dr. Seaton retired from the office of Medical Officer of the Local Government Board at the close of the past year on account of serious ill-health. When last we had occasion to refer to him we were enabled to state that his health was slowly improving, and we learn that this improvement became more marked as the days went on. Unhappily it proved delusive. On Monday evening last he became suddenly worse, and on Wednesday evening he died. We hope to present our readers with a notice of his life and works in our next impression.

SMALL-POX IN LONDON IN 1879.

IT appears from the Registrar-General's last weekly return that 458 fatal cases of small-pox were registered in London during the fifty-three weeks of 1879. In the two preceding years the deaths from this disease were 2544 and 1416 respectively. No less than 280, or 61 per cent., of these 458 deaths from small-pox last year were recorded in the Metropolitan Asylum Hospitals. Distributing these hospital cases to the localities whence the patients were admitted, it appears that 93 of the 458 deceased small-pox patients in 1879 had resided in Greenwich and Deptford, 80 in Camberwell, 52 in Southwark (including Newington), 39 in Fulham, 25 in Kensington, and 25 in Wandsworth. The small-pox deaths in London last year were equal to 126 per million of the estimated population; this rate was considerably below the average annual rate from the disease in London, which was equal to 410 per million during the forty-two years 1838-79, and ranged between 2422 in 1871, and 17 in 1874. It is now generally known that the average death-rate from small-pox in England and Wales has fallen, since the Compulsory Vaccination Act was passed in 1853, to less than half that which prevailed during the period of civil registration that preceded the passing of that Act. In London, the decline in the death-rate from small-pox since 1853 has not been so marked as in the rest of England and Wales. During the sixteen years, 1838-53, the annual death-rate from small-pox averaged 512 per million of the London population; and in the twenty-six years since the Compulsory Vaccination Act came into operation it has not averaged more than 348 per million. The statistics of vaccination show that more children escape the operation of the Compulsory Act in London than in other parts of England and Wales; and it is therefore not surprising that small-pox has been less successfully controlled in the metropolis than elsewhere. Out of London the mortality from small-pox in England and Wales last year was very considerably smaller than in any previous year on record.

SUDDEN DEATH IN ACUTE RHEUMATISM.

THE question raised at the last meeting of the Clinical Society by Dr. Goodhart is one of great practical importance and deserves serious consideration. He related a case of acute rheumatism of moderately severe type in a previously healthy young woman, where sudden death occurred whilst under treatment by salicylic acid. Setting aside the hypothesis that the case was one of septic poisoning and not of rheumatism, for which there seems to be no evidence either clinical or post-mortem, or that death was due to pulmonary embolism, sufficiently disproved by Dr. Goodhart, three alternatives were presented to the meeting. These were, that death was due to impairment of the muscular wall of the heart, or to the toxic effect of salicylic acid, or to the rheumatic poison itself. It is true that there was pericarditis to a slight degree, but careful scrutiny failed to reveal a sufficient amount of change in the myocardium to account for death from this cause. Dr. Green did well to draw attention to the fact that the existence of a contracted ventricle does not imply absence of marked degeneration, owing to the effect of cadaveric rigidity; but Dr. Goodhart did not rely upon the presence of contraction alone as disproving the existence of marked degeneration. Then comes the important question of the drug itself. Only sixty grains in all had been taken, but its administration was continued to within an hour before death. In the face of the somewhat alarming statements made by Dr. Mahomed, some might hesitate to acquit it of all blame. He testified to having noticed in all patients subjected to this drug marked evidence of failing heart-power in the enfeeblement or absence of the first sound. So far as we know this statement stands almost alone. Salicin and its congeners are now prescribed with remarkable frequency, not only in rheumatism, but in other affections also; yet few of those who prescribe it would venture to say that they have *invariably* met with this

significant sign of cardiac failure following its administration. There is no physician who does not closely watch day by day the character of the heart-sounds in every case of acute rheumatism; and if Dr. Mahomed's statement be of universal application, it is astonishing, to say the least, that it has not been pointed out before. At the same time, it must be admitted that depressing effects have been noted, and have led to the abandonment of the drug in certain cases; but hitherto such cases have been regarded as exceptional, and it is a long leap from the particular to the universal. The drug may be as potent for harm as it is undoubtedly for good, and its use should be directed by caution; but it must not be condemned outright without further earnest inquiry. The discussion the other night will, no doubt, result in particular attention being paid to these points. Lastly, the view to which Dr. Goodhart and some other speakers most inclined was, that death was due to the direct action of the rheumatic poison. This is quite conceivable, and Dr. Bristowe lent valuable support to it in his narration of two cases of sudden death not under the salicylic treatment. Apart from actual lesion of the heart-wall, sudden death in acute rheumatism may be conceived to be due either to hyperpyrexia or to cardiac paralysis. Both classes of cases may well come under the head of "cerebral" rheumatism, for in both the medullary nerve-centres are probably involved through the direct action of the rheumatic poison. In this connexion it is singular to note that during the last few years (almost coincident with the universal adoption of the salicylic treatment) deaths from rheumatic hyperpyrexia have been very infrequent; whilst we have Dr. Goodhart's statement, on the other hand, that within this period he has met with two other cases analogous to the one he had read. Hyperpyrexia may fairly be put aside in this case. There were none of the phenomena that mark its onset; but that death was due to failure of the heart was evidenced by the ominous rise in pulse-rate noted—a sign which almost induced Dr. Goodhart to discontinue the salicylic acid. The subject is one that certainly requires elucidation; and perhaps the committee of the Society that is engaged upon the subject of hyperpyrexia may be enabled by its researches to throw a side-light upon this other, and quite as inscrutable, class of cases of sudden death in acute rheumatism.

DIPHTHERIA IN RUSSIA.

THE Russian journal, the *Voice*, gives a lamentable account of the progress of diphtheria in Russia-in-Europe. It is but thirty years ago that this disease first attracted attention in that empire, and now it has become the most formidable of the maladies ordinarily prevalent. It has spread over seventeen of the fifty European provinces, and during the last six years it has ravaged continuously the southern provinces of Poltava, Kherson, Kharkow, Catherinoslaw, Kiew, and Bessarabia. The zemstvos of these provinces have found it necessary for three years to prepare special returns of the disease, and they declare that it has become a public calamity. Moreover, the report of the Medical Department of the Minister of the Interior shows that of the total mortality of Russia, the greatest part is now due to diphtheria. In Poltava the mortality from diphtheria is so enormous that it exceeds by 1·5 per cent. the number of births. The zemstvos have appealed to the Imperial Government for help, confessing that they are unable to struggle against the evil unaided. The zemstvos of Kharkow, Moscow, and Riazan have suggested that the provincial assemblies should be empowered to combine in order to take measures in common against the epidemic. The Red Cross Society has entered boldly upon the task of giving such assistance as it is possible for it to give to the infected populations, by organising convoys and sending detachments of medical men and sisters of charity, but the succour it can afford is stated to be insignificant in proportion to the magnitude of the mischief and to the extent of territory over which it prevails.

THE DOVER HOSPITAL.

UNLESS the *Dover and County Chronicle* for the 17th inst. has strangely misrepresented matters, the honorary medical and surgical staff of the Dover Hospital is likely to bring itself into evil odour in an unworthy cause. It appears that in the year 1875 a bye-law was made which rendered it incompetent for any person who had held the post of resident medical officer "to engage in private practice, or accept any medical appointment in the town, for two years after vacating his appointment." The object of this extraordinary regulation does not require any explanation; it was clearly intended to obviate the possibility of any house-surgeon engaging in private practice in the town after leaving the hospital. After some preliminary discussion this rule was very properly rescinded at an annual meeting of the governors held on the 16th inst. It is stated, however, that four out of the five members of the honorary staff have resigned in consequence. If this be so, it is needless to say that unless they are able to put a different colour on the facts given by our lay contemporary, these gentlemen have placed themselves quite out of the reach of the sympathy of their professional brethren. Some explanation is imperatively needed.

HEALTH STATISTICS OF SALFORD.

THE Medical Officer of Health for Salford (Dr. Tatham) has recently presented to his sanitary authority, and published, a most valuable report on the health of that borough during the ten years 1869–78. The idea of preparing a decennial report dealing with the ten years during which Salford has had the advantage of a medical officer of health was a happy one. The statistical work in the report is thoroughly trustworthy, and eminently calculated to throw useful light upon the causes of the high rates of mortality that have so long prevailed in Salford. It appears that the annual rate of mortality within the borough during the fourteen years 1865–78 averaged 27·7 per 1000, exceeding by 4·2 per 1000 the average rate that prevailed in London during the same period. This signifies that during the fourteen years more than 5000 persons died in Salford who would have survived if the death-rate during that period had not exceeded that which prevailed in London. Dr. Tatham is, however, able to prove by his statistics that there is conclusive evidence of decided sanitary progress in Salford in recent years. Dividing this period of fourteen years into two periods of seven years, we find that the death-rate, which averaged 28·5 per 1000 in the seven years, 1865-71, declined to 26·9 in the more recent seven years, 1872-8. Thus mortality in Salford showed a proportional decline equal to 5·6 per cent. in the later, compared with that in the earlier period of seven years; in London, however, the decline of mortality in the same periods was equal to 7·4 per cent. It is in the last two years embraced by Dr. Tatham's report that the most marked decline in the Salford mortality occurred. The death-rate in the borough fell to 25·1 and 25·6 in 1877 and 1878, which, although considerably in excess of the London rate, and of the average rate in the twenty large English towns, was lower than in any two consecutive years on record in Salford. The mortality in these two years was lower by 8 per cent. than the average rate that prevailed during the first eight years after the formation of the Salford Health Committee. Dr. Tatham does not attempt to comfort his sanitary authority with the statement that the marked excess in the death-rate of the borough is due to the high birth-rate that prevails. It has been conclusively proved that the proportional

age-distribution of a population which produces a high birth-rate should cause a lower death-rate than the age-distribution which causes a low birth-rate. The Salford Town Council is now plainly told by Dr. Tatham that the gross death-rate in the borough, high as it is, understates the true excess of mortality due to the sanitary shortcomings of the town. The excess of mortality in Salford occurs mainly among infants and children aged under five years. In 1878 the excess of mortality at all ages, after due allowance for the age-distribution of the population, was equal to 18·5 per cent., compared with the English Life-table death-rate in a population at similar ages; among children under five years of age, however, the excess of mortality, compared with the same standard, was no less than 42·8 per cent. The excess of child mortality in Salford may well engage the serious attention of its sanitary authority. We strongly recommend Dr. Tatham's report to those who are interested in studying the important relations between mortality statistics and the health-condition of urban populations. The mortality statistics of Salford have never before been so clearly and soundly analysed as in this decennial report; and it may be hoped that the reduction of the death-rate in 1877 and 1878 will stimulate the local sanitary authority to the initiation of further efforts in the direction of sanitary progress. Salford since the latter part of 1876 has possessed an excellent hospital for infectious diseases, to which 508 patients had been admitted before 31st December, 1878. To the beneficial effect of this hospital may partly be attributed the decline of zymotic fatality in Salford in 1877 and 1878.

DISLOCATION AT THE HIP, WITH FRACTURE OF THE FEMUR.

THE diagnosis and treatment of dislocations at the hip must always attract the serious attention of surgeons, for while in most instances the deformity produced by the displacement of the bones is very obvious, it is well known that experienced surgeons have at times found difficulty in coming to a decision as to the exact nature of the injury sustained. And now that the old and rough method of reduction by extension, aided by constitutional depressant remedies, has given place to the reduction by manipulation, aided by the complete muscular relaxation of anæsthesia, it becomes perhaps more than ever important to recognise correctly the exact position of the displaced bone, and to study its course from the joint. The discussion at the Medical and Chirurgical Society, reported in THE LANCET of last week, dealt with a matter of greater practical interest than might at first sight appear, and it is by no means a matter of indifference to the most "practical" surgeon whether the head of the femur escapes at the lower? or the back of the capsule of the joint in the common backward dislocation.

Dr. Oscar Allis of Philadelphia has published, in the "Transactions" of the Medical Society of the State of Pennsylvania for 1879, an interesting paper, in which he draws attention to the cases in which the femur is dislocated, and also fractured in its shaft. He states that in these cases the dislocation may readily be overlooked, that the head of the bone remains close to the cotyloid cavity, the Y ligament being untorn, and the change in direction of the upper ragment is greater than in a simple dislocation. The directions for treatment are to attempt reduction of the displaced bone while extension is made on the limb in the line of its axis; and if this attempt fails, the limb and lower fragment should be brought into a line with the upper one, displaced as it is, and afterwards, when union has occurred, reduction of the dislocation attempted, and if that fail the head should be forced into the thyroid foramen, to make a new socket for itself there. If, on the other hand, the fracture be treated with the limb brought parallel with its fellow, when reduction is afterwards accomplished the limb is thrown out of its proper position and may be permanently deformed, and to a great extent useless.

ANIMAL VACCINATION IN INDIA.

IT would appear from recent proceedings of the Punjab Hindu Association (Anjuman-i-Panjab) that the promoters of the Bill for making vaccination compulsory, and instituting vaccination from the heifer into Bengal, have unintentionally conducted their movement in such fashion as to risk wounding the religious susceptibilities of the Hindu population. Lymph taken from the teats and udder of a heifer or cow would be deemed by the Hindu contaminating in the sense of leading to loss of caste. This does not affect the Mahommedans, and seems to have been lost sight of by the Mahommedan gentleman who moved the Bill in the Legislative Council of the Government of India. Hitherto the mass of Hindus have submitted to vaccination in ignorance of the real nature of the lymph employed, regarding the operation as the Government method of "inoculation." It is held highly undesirable that the actual nature of vaccine lymph should be made generally known as was the case in the discussion on the Bill, and as has been done in Dr. Cuningham's "Sanitary Primer," lest religious prejudice should be added to the difficulties already experienced in carrying out vaccination. The Association, therefore, urges some little reticence in this matter, especially in translating the paragraphs of the "Primer" into the native dialects. Dr. Leitner, the President of the Association, tells us, however, that the religious objection which attaches to the female of the bovine species does not attach to the male, and that if steers were substituted for heifers, "all the religious grounds of opposition to the Government mode of inoculation would be at once removed and could court the fullest inquiry." If this be the case, it should be possible to conciliate the Hindu population of India in regard to the Bill. The Association voted against vaccination being made compulsory.

CHILDREN'S HOSPITAL, PENDLEBURY.

THE letter of sympathy addressed by a large number of the leading practitioners in Manchester and the neighbourhood to Dr. Henry Humphreys, late physician to the Children's Hospital, Pendlebury, may be taken as expressing the feeling of the profession generally on this disagreeable episode. Three years ago Dr. Rayne, who had been ignominiously dismissed from the post of physician, vainly endeavoured to obtain a just and reasonable explanation of the manner in which he had been treated. There is, we would fain hope, a better chance for Dr. Humphreys. A thorough investigation into the management of this institution is urgently needed, and unless this is accomplished it is incumbent upon every member of the profession who respects his calling to refrain from accepting office there. Meanwhile we cordially re-echo the kindly sentiments contained in the letter to Dr. Humphreys, published in another column.

THE SANITARY STATE OF RUNCORN.

THE first drop which has reached us of the coming shower of medical officers of health's annual reports for 1879 arrives in the form of the report of the medical officer of health for Runcorn, Mr. R. H. Mouritz. It is of the briefest, but contains much which should call for the attention of the sanitary authority. The medical officer speaks of a fair amount of sanitary work done during the past year, and of a death-rate from all causes of 22·0 per 1000, which he hopes will become lower in future years; but he gives particulars which show that the Runcorn Sanitary Authority cannot afford to congratulate itself upon this comparatively low death-rate, as it appears

disposed to do. Runcorn is exposed to the irritating vapours cast off so freely by the large chemical works in its vicinity. These vapours, from their antiseptic nature, the medical officer of health holds to be beneficial in restricting the prevalence of zymotic diseases, but, on the other hand, they are most mischievous in exciting lung diseases. Infantile mortality is described to be enormously high, and it seems there is much overcrowding in the town. The sanitary authority "congratulated the medical officer on the satisfactory character" of his report, when it was presented to them. We fail to see the grounds for congratulation.

THE RUSSIAN ASSOCIATION OF NATURALISTS AND MEDICAL MEN.

THE sixth congress of the Russian Association of Naturalists and Medical Men has been recently held in St. Petersburg. The section of Medicine was presided over by M. Lamble, and the section of Hygiene by M. Jacobi. Among the subjects discussed in these sections we note: traumatic fever, by M. Wahl; the weight of the body in epileptics, by M. Kovalevsky; the distribution of stammering in Russian Europe, by M. Chervin; the sewerage and scavenging of towns, by Count Suzor; the waters of Cronstadt, by M. Arkhangelsky; the influence of putrified matters upon the human organism, by M. Dovriachine; the influence of high and low temperatures upon the human body in health and in disease, &c. In the section of Hygiene the questions submitted for discussion were arranged in four groups, as they related respectively to the medical service of the zemstvos (local medico-sanitary administration), the military medical service, the marine medical service, and the railway medical service.

THE ARCHBISHOP'S MEDICAL DEGREE.

HIS Grace the Archbishop of Canterbury has used his power of conferring a degree in medicine in favour of Mr. James Rogers, of Swansea, whose diplomas date from 1841. He was Mayor during the recent Church Congress. It would be difficult to defend the principle of such a doctorate. The medical law of England, as made by the Act of 1858, does not recognise such doctorates, excepting such as were conferred *prior* to the passing of the Act of 1858. Neither does the Government Bill which is now before the Select Committee of the House. We may nevertheless congratulate Dr. Rogers on an honour which the Archbishop only confers on the advice of men of standing in the profession. In this instance three doctors of medicine, two of them Fellows of the College of Physicians, concurred in commending the conferring of the degree. Dr. Rogers has practised in Swansea and the neighbourhood for nearly 40 years, and enjoys the respect of his neighbours and of his professional brethren. The expenses incident to the conferring of the degree are about eighty guineas, and they have been more than met by subscriptions from men of all creeds and classes in Swansea.

COTTAGE HOSPITALS.

THESE institutions are multiplying, and making out a very good *raison d'être* by their work and its results. A very interesting account of one at Savernake, by Mr. William Gilbert, appears in the December number of *Good Words*. It was originated by the Rev. J. O. Stephens, vicar of Savernake, who was struck with the disadvantages of a farm labourer who had to be taken many miles to a doctor, and many more to a large hospital. It is said to be one of the most appropriate and elegant buildings of the kind, on the summit of a hill, with four or five acres of ground round it. The wards are all on the ground floor, and contain on an average eight beds each. Two hundred and eleven serious cases were treated in 1878 at a cost of only 15s. a week, and with a mortality of only a decimal fraction more than 3 per cent.

The *Evesham Journal* of December 13th contains a full account of the opening of the Evesham Cottage Hospital, which is to accommodate eight persons at a time, at a total cost of £1736. We cannot withhold our approval from these institutions, especially when the working classes themselves are encouraged to take an interest in supporting them. We are persuaded there are many Coopers and Brodies in country places who only need the proper hospital conditions to show good surgery, to say nothing of medical cases. Metropolitan surgeons will be interested in the results of rural surgery. And the poor will be largely benefited.

A MODEL FOUNDLING HOSPITAL.

M. BROCA, at a recent meeting of the Paris Academy of Medicine, read a very favourable report upon the Foundling Hospital at Moscow, which he had visited while in that city. M. Broca says that this hospital, which was founded in 1764, covers five acres of ground, and that infants are received into it without any inquiry as to their origin, though the parents are allowed to claim them back. As soon as they are admitted they are provided with nurses, and remain in the hospital for three or four months, at the expiration of which time they are put out with their nurses into lodgings in the country. The rate of mortality in the hospital, which was about 81 per cent. at the end of last century, has now been reduced to 25 per cent.—a result which M. Broca attributes in part to the spacious and well-ventilated rooms and numerous baths which have recently been erected, and partly to the fact that the medical staff has been increased to such a degree that no doctor has more children under his care than he can manage. The children are weighed every week, and the registered weights form some interesting statistical tables. There are never fewer than 3000 nurses with infants at the breast in the Moscow hospital, and some months there are as many as 11,000 infants admitted.

A NUISANCE AFLOAT AT RAMSGATE.

RAMSGATE has been suffering from a serious nuisance afloat in her inner harbour. It appears that a few days ago a ship bound for Berwick-on-Tweed, and laden with bones from Naples, was brought into the harbour. The bones were in a state of rapid putrefaction, and emitted so great a stench as to be all but unbearable in the vicinity of the harbour. The pier was deserted of promenaders, and the nuisance extended even so far as the Granville Hotel, driving away some of the visitors there. The Sanitary Committee of the town took up the matter actively, and at the last news had considerably abated the nuisance. We may assume that it has now been entirely removed.

DR. PIROGOW.

IN 1882 this celebrated surgeon, if, as is to be hoped, he is spared till then, will have completed the fiftieth year of his professional life. It is proposed by his admirers and pupils throughout the Russian empire to establish a surgical hospital, to be named after him. This hospital is to be completed and opened in honour of his jubilee. Arrangements have been made for securing subscriptions and donations towards this commendable end.

WE hear with regret of the death, suddenly, of Charles Benson, A.M., M.D., of Dublin. The deceased gentleman was born in 1797, and was Consulting Physician to the City of Dublin Hospital, and an ex-President of the Royal College of Surgeons of Ireland.

THE Registrar-General for Ireland has adopted an improvement in connexion with his weekly reports, to the effect of including in his returns some fifteen towns, containing, according to the last census, upwards of 10,000 inhabitants.

DR. SIDNEY COUPLAND has been appointed Physician to the Middlesex Hospital, in succession to Dr. E. H. Greenhow, resigned. A vacancy is thereby created in the staff of assistant-physicians.

THE numerous friends of Sir Dominic Corrigan, Bart., will be gratified to learn that a marked improvement has taken place in his condition, reviving hopes in the favourable termination of his malady.

HEALTH OF LARGE ENGLISH TOWNS.

SECOND WEEK OF 1880.

THE decline of the recorded mortality in the first week of this year was maintained last week. In twenty of the largest English towns, estimated to contain, in the middle of this year, very little short of seven and a half millions of persons, or nearly a third of the entire population of England and Wales, 5262 births and 3484 deaths were registered during last week. The births exceeded by 77, and the deaths by 209, the average weekly numbers during 1879. The deaths were within 20 of those returned in the previous week; and the annual death-rate, which had been equal to 29·1 and 24·0 per 1000 in the two preceding weeks, was 24·2 last week. The lowest death-rates last week in the twenty towns were 16·0 in Brighton, 16·9 in Bristol, 17·3 in Leeds, and 18·1 in Leicester. The rates in the other towns ranged upwards to 27·1 in Plymouth, 27·2 in Hull, 27·6 in Manchester, and 28·1 in Liverpool.

The deaths referred in the twenty towns to the seven principal zymotic diseases, which had been 607 and 541 in the two preceding weeks, further declined last week to 518; they included 164 from whooping-cough, 143 from scarlet fever, and 123 from measles. Whooping-cough showed the largest proportional fatality in Newcastle-upon-Tyne, Salford, and London; scarlet fever in Norwich, Sunderland, and Salford; and measles in Hull, Plymouth, Nottingham, and Liverpool. The 19 deaths referred to diphtheria included 10 in London, 2 in Manchester, and 2 in Bradford. Small-pox caused 4 more deaths in London, but not one in any of the nineteen large provincial towns. The number of small-pox patients in the Metropolitan Asylum Hospitals, which had been 56 and 77 at the end of the two preceding weeks, were 75 on Saturday last; during the week but 8 new cases of small-pox were admitted to these hospitals, against 22 and 30 in the two previous weeks.

The fatality of lung diseases, under the influence of lower temperature, showed a slight increase. The deaths referred to diseases of the respiratory organs in London, which had been 672 and 455 in the two previous weeks, rose last week to 512, and exceeded the corrected weekly average by 42; 347 resulted from bronchitis, and 113 from pneumonia. The deaths from these diseases were equal to an annual rate of 7·2 per 1000 in London, whereas in Liverpool the rate from the same diseases was equal to 8·1 per 1000.

LONDON AND PARIS MORTALITY IN 1879.

IT appears from a summary of the weekly returns of mortality issued during last year in London and Paris, that the death-rate of the two cities in 1879 showed their usual wide difference in favour of London. During last year the rate of mortality in London was equal to 23·6 per 1000 of the estimated population, which was almost identical with the rate during the preceding year 1878; in the ten years 1869-78 the average death-rate in London was 23·1 per 1000, and somewhat lower than the rate last year. In Paris the death-rate last year was equal to 26·3 per 1000 of the estimated population, against 24·1 in 1878. Thus the mortality in Paris last year exceeded by 2·7 per 1000 that which prevailed in London. These figures, however, by no means correctly represent the excess of mortality in the Paris population. Setting aside the fact that a large number of infants in Paris who die during the first few days of life are there recorded as stillborn, which in London would be counted as deaths, the age constitution of the Paris population should give a considerably lower rate of mortality than that of the London population. Calculated by the same tables, the normal or life-table annual rate of mortality is only 19·8 in Paris, instead of 21·8 in London. This is due to the fact of the small proportion of children in the Paris population, while the proportion of elderly persons is scarcely larger than in London. Corrected for this difference of age-constitution, the death-rate in London in 1879 would become 21·5 per 1000 for true comparison with the Paris rate of 26·3. The significance of these rates is, that in equal numbers living in the two cities last year 122 died in Paris to each hundred in London. Looked at in a different way, if these two rates were maintained in a stationary population the mean duration of life would be only thirty-eight years in Paris, instead of forty-seven years in London. If we look to the fatality of one or two of the principal zymotic diseases we see corroborative evidence of unsatisfactory sanitary condition in Paris. Small-pox caused 951, diphtheria 1002, and typhoid fever 1168 deaths in Paris last year; against 458, 592, and 1099 respectively in London. After due allowance for difference of population, small-pox was nearly four times, diphtheria more than three times, and fever nearly twice as fatal in Paris as in London. From the beginning of this year the Paris municipality commenced a new form of weekly return, which is signed by Dr. Bertillon, as chief of the Statistical Bureau. The form and detail of this improved weekly bulletin will afford valuable assistance in analysing the causes of the recent excess of mortality in Paris. In the return for the first seven days of this year it appears that 64 fatal cases of small-pox, 27 of typhoid fever, and 28 of diphtheria and croup were registered in Paris. No less than 28 of the 64 deaths from small-pox were of children under five years of age.

ST. JAMES'S HOME FOR FEMALE INEBRIATES, KENNINGTON PARK.

WE have been favoured by C. Corbett Blades, M.D., Surgeon to the Home, and Senior Surgeon to the Royal South London Dispensary, with the following description of the above-named institution.

Now the Habitual Drunkards Act has come into operation, it may be interesting to the profession to learn something of a Home which has been doing good work for the last four years, where the average number of free inmates has been seventy, aged from fourteen to sixty years.

The Home consists of five dwelling-houses, which have been put into the best possible sanitary state, under the supervision of my friend Dr. Iliff, officer of health for Newington.

The institution is managed by a Committee of ladies and gentlemen, the Earl of Shaftesbury being the president; the actual responsibility mainly falls upon "the Lady Superior," who is enthusiastic in her work, as she needs be, to carry on, in many respects, a most disagreeable duty. The Home is chiefly supported by the washing taken in, the needlework, and by some little charitable assistance. The younger are taught every domestic duty, and as they become fitted and, having behaved well, have places found for them, and "fitted out" with four pounds' worth of clothes.

The inmates get up at 6 A.M., and attend chapel twice a day. For breakfast they have tea, coffee, cocoa, bread-and-butter; for dinner, meat, vegetables, bread, and puddings; for tea, the same as for breakfast. They go to bed at 9.30 P.M. They walk daily for half an hour in the grounds, unless it rains. In the summer, those sewing sit out of doors all day, under an awning. Very little medicine is given, and that of the simplest. When anyone is brought drunk (perhaps has been drinking for weeks) she is put into a separate room away from the others, is constantly watched, given beef-tea, arrowroot and milk, eggs and milk, generally a simple aperient. It is wonderful how soon the tongue cleans; solid food is enjoyed, she is a new being.

Not any alcohol, narcotic, or sedative is given. Only one was confined to bed last winter for a short time with bronchitis; this winter she is well, and there has been scarcely a case of "cold."

The free cases are sent by magistrates and by missionaries. The paid cases require a certificate from their medical man, saying they are not insane, and a written promise from a friend to remove them if required.

The Home can be seen on application any day except Sunday, after 10 A.M.

Correspondence.

"Audi alteram partem."

THE MEDICAL DEGREES OF THE LONDON UNIVERSITY.

To the Editor of THE LANCET.

SIR,—In your report of the late meeting of the Convocation of the University of London, you remark, "It is significant somewhat of the apathy of its medical graduates that so few presented themselves on the occasion." A few minutes' consideration will show you that probably their absence arose, not from apathy, but from a desire to fulfil the most pressing duty. As you well know, a medical man, unless he have a partner or assistant (both which things I abhor), cannot leave his practice for many hours in any peace or comfort if it be at all extensive, or embraces much midwifery. Take my own case as an example of many others. I reside three or three and a half hours' run from London; but, owing to railway arrangements, I, had I carried out my intention of being present at the meeting in question, should have been obliged to start at 11.37 A.M., and could not have returned until about the same hour next morning. On the morning of the 13th inst., in our neighbourhood a very heavy snowstorm was raging—so fierce, in fact, that I feared to make the attempt lest the line might become blocked and I should not be able to get home on the following day. As the day wore on I of course saw such a contingency would not occur, but then it was too late to reach town in time for the meeting. Had I been there I should have strenuously opposed the resolution moved by Dr. G. V. Poore, on these grounds:

1st. We have to compete with the older universities, and the only method in which we can overcome the prestige given by their long-continued existence and the social traditions connected with them, is by the high standard of our examinations.

2nd. Although the character of the examination be not altered as far as knowledge is concerned, yet by increasing the number of the times for holding the examination, indirectly the mental power of the successful candidates will be lowered; at least it seems to me that the man who can get up four subjects in twelve months must be possessed of more mental power or more industry than the man who can only manage three subjects, and therefore as a whole our body of medical graduates are better without the latter man than with him.

Should the proposed change be carried out we shall probably increase the number but not the quality of our medical members.

Far from regarding the fact that only 21 per cent. of candidates ultimately obtain a degree in medicine as a thing to be deplored, I consider it a thing to be deeply grateful for.

As to the question of "a mischievous strain of the brain power," I would only point to the positions held by many of our graduates; and I very much doubt whether more of our men break down from mental strain than do men holding lower degrees. My *personal* experience tells decidedly in favour of our University as compared with the College of Surgeons; but this experience is not large enough to be of any value.

Although writing about medical degrees, I fhave yet to learn that the other degrees are in their way easier to obtain; and the same reasoning may be applied to the varied degrees granted by the University of London.

I remain, Sir, yours obediently,
G. C. TAYLER, M.D. Univ. Lond.

Trowbridge, 17th Jan., 1880.

CHILDREN'S HOSPITAL, PENDLEBURY.

To the Editor of THE LANCET.

SIR,—I beg to forward you an address of sympathy to Dr. Humphreys, which has been signed by the physicians and surgeons to the hospitals in Manchester and Salford. The circumstances of the case were stated by Dr. Humphreys in his letter to your paper of the 20th of December.

The action of the committee has excited great indignation in the profession, since no justifiable cause has been given for his suspension by the committee.

Personally, I have had a full opportunity of observing the able and painstaking manner in which Dr. Humphreys fulfilled his duties whilst physician to the hospital. I had the pleasure of acting as resident medical officer under him at the Children's Hospital for twelve months.

Though I am well acquainted with the working of many hospitals, I can safely say that I have never seen work more efficiently carried out than it was by Dr. Humphreys, who devoted his time and energies most thoroughly to the children under his care.

I myself fail utterly to comprehend the procedure which terminated in his resignation.

I am, Sir, yours, &c.,
JUDSON S. BURY, M.D., B.S. (Lond.)
Late Senior Resident Medical Officer to the Children's Hospital, Pendlebury.

Fitzwarren-street, Pendleton, Jan. 1880.

To HENRY HUMPHREYS, Esq., M.D., M.R.C.P.

We, the undersigned physicians and surgeons to the hospitals in Manchester, wish to express our sympathy with you in the position in which you have been placed by the action of the Committee of the Children's Hospital, Pendlebury.

Since you came to Manchester, three years ago, you have shown by your contributions to the Medical and Microscopical Societies, and in other ways, that you possess marked ability, and that you follow your profession most zealously.

We deeply regret that your work, which promised to add much to medical knowledge, should have been cut short for the present in the manner it has been.

Since the Committee of the Pendlebury Hospital refuse to give other grounds for their action than those which appear in your letter to THE LANCET of the 20th of December, we can only presume that they have acted solely on these grounds. Should such be the case, we feel that their conduct has been extremely arbitrary and unwarranted, and that they have been wanting in that courtesy which was to be expected from the committee of a hospital towards a physician of your standing. If, on the other hand, the committee have been led to the course they have adopted by reasons other than those which they have set forth, but which they decline to communicate to you, we cannot but characterise such conduct as unjust to you, and unworthy of those gentlemen to whom the supervision of the hospital has been entrusted.

We feel that the committee have, by their action, done you a most grievous wrong, and we are satisfied that in doing so they have acted in a manner detrimental to the interests of the hospital of which they have the management.

Wm. Roberts, M.D., F.R.S., F. A. Heath, M.R.C.S., H. Simpson, M.D., E. Lund, F.R.C.S., J. Morgan, M.D., F.R.C.P., S. M. Bradley, F.R.C.S., D. J. Leech, M.D., F.R.C.P., W. Whitehead, F.R.C.S. Ed., J. Thornburn, M.D., D. Little, M.D., J. Dreschfeld, M.D., M.R.C.P., J. Hardie, M.D., J. Ross, M.D., M.R.C.P., D. Lloyd Roberts, M.D., F.R.C.P., R. Heslop, L.R.C.S., C. J. Cullingworth, M.R.C.P., J. H. Ewart, M.R.C.S., E. Gumpert, M.D., W. N. Maccall, M.D., H. W. Boddy, M.D., S. Buckley, F.R.C.S., G. Reed, M.D., A. W. Stocks, M.R.C.S., A. M. Edge, M.D., M.R.C.P., A. Boutflower, M.R.C.S., J. H. Morris, M.R.C.S., W. J. Sinclair, M.D., R. D. Fox, F.R.C.S. Ed., J. Scott, M.R., C. E. Glascott, M.D., S. H. Mules, M.D., A. E. Jones, M.D., F. M. Pierce, M.D., T. H. Pinder, M.R.C.S.

To the Editor of THE LANCET.

SIR,—I can endorse the statements of your correspondent, Dr. Rayne, in reference to the management of the Children's Hospital, Pendlebury.

When a resident physician was required for the institution, some two years since, I applied for the office, stating that I had been hon. surgeon to one provincial hospital, hon. physician to another, that I held three illuminated testimonials, and had received two public subscription-gifts.

I was not deemed good enough to fill the office.

I am, Sir, yours faithfully,
M.D., M.R.C.P.E., M.R.C.S., L.S.A.

ON THE DIAGNOSIS OF HYDROPHOBIA.

To the Editor of THE LANCET.

SIR,—In a letter on the diagnosis of hydrophobia, which appeared in THE LANCET of January 17th, it is suggested that, in cases where the diagnosis is obscure, a crucial test may be applied by ascertaining whether the saliva of the patient is capable of communicating the disease to one of the lower animals, the rabbit being chosen for this purpose, as being readily inoculable, and the period of incubation being in that animal of very short duration.

In a case which was lately under treatment in the Manchester Royal Infirmary, this test was applied, not with a view of establishing a diagnosis, for of this there was no doubt, but merely with the object of verifying the results which had recently been obtained by M. Raynaud, in Paris.

In this instance the patient, a boy, aged six years, bitten by a dog about seven weeks previously, was admitted into the hospital on October 2nd, 1879, with well-marked symptoms of hydrophobia, which had made their appearance about thirty-six hours previously. In spite of treatment the case terminated fatally about five hours after admission.

Shortly before death a rabbit was obtained, and an incision having been made through the skin of the dorsal region, some of the saliva (of which there had been a copious discharge) was removed with a spatula from the patient's mouth, and immediately introduced into the cellular tissue beneath the skin. In order to make the inoculation more sure, a needle was also moistened with the saliva, and several times introduced through the wound into the muscles and subcutaneous tissue in its immediate neighbourhood.

No effect was, however, produced upon the rabbit; the wound on its back readily healed without any signs of irritation, and the rabbit is still living in perfect health, having never presented any morbid symptoms of any kind, though it has been closely observed.

I write these few lines in order to show that this proposed crucial test cannot be safely relied upon, for in this case, where the disease was well-established, and where the inoculation was carefully performed, the results were absolutely negative.

I am, Sir, your obedient servant,
F. A. SOUTHAM, M.A. Oxon., F.R.C.S.,
Resident Surgical Officer.

Royal Infirmary, Manchester, Jan. 18th, 1880.

"ERRONEOUS IMPRESSIONS OF PROFESSIONAL WORK."

To the Editor of THE LANCET.

SIR,—Your issue of to-day contains a leading article entitled "Erroneous Impressions of Professional Work," the text of which is an extract by one of your contemporaries from my published Report of this Hospital for 1879. The words quoted are these:—"Owing chiefly to the application of electricity being troublesome and tedious, and requiring patience and sacrifice of time, the belief in its efficacy is theoretical rather than practical with the great majority of the medical profession; and it may be confidently affirmed that in England its medical value has never yet been fairly and exhaustively tested." You state that you should not have alluded to the matter had not this assertion with respect to electricity been "*an aspersion on the work of every practitioner in the land.*" I emphatically deny this, and I hope that upon consideration you will withdraw it. I see no reason to modify my opinion. As I have stated elsewhere—and I am confident I shall be supported by the experience of all physicians who see much of diseases of the nervous system,—a theoretical belief in the benefit to be derived from judicious electrization is widely diffused, while comparatively very few medical men have a practical knowledge of the subject; and hence it is still too common (as was the complaint of Golding Bird thirty years ago) for the medical practitioner to consider that when his fiat has gone forth, "Let the patient be electrified," he has done all that is necessary, while the patient usually carries out this mandate by the purchase of a rotary magneto-electric machine, and by using it according to the directions of its maker.

You seem to assume in your article that the medical profession includes only hospital physicians, and you ignore the general practitioner, who most assuredly in the vast majority of cases possesses no electrical apparatus whatever, so that his knowledge is perforce "theoretical;" while of hospital physicians themselves the greater proportion are similarly situated. You write that at "every hospital in the kingdom electricity is had recourse to *in each and every one of its forms.*" Although in this very number of THE LANCET you have published a letter from Dr. Allison, advocating the use of static electricity in carcinoma, you will not find a dozen (perhaps not half a dozen) hospitals in Great Britain and Ireland which even possess a static machine; and this being so, surely it is ungenerous and unfair to characterise my opinion as to the medical value of electricity not having been exhaustively tested, in the anything but courteous tone you have adopted; and I am the more sensitive perhaps to being thus pilloried as I am conscious of having for years past, as my published works and correspondence in your own columns testify, earnestly endeavoured to induce the general practitioner to use electricity himself rather than to send his patients to an expert for advice. I send you our Hospital Report, and trust to your sense of justice to accord as prominent a position to this letter as was occupied by your article.

I am, Sir, your obedient servant,
HERBERT TIBBITS, M.D., F.R.C.P. Edin.,
Hon. Medical Superintendent.

The West End Hospital for Diseases of the Nervous System,
73, Welbeck-street, W., January 10th, 1880.

*** We were not, of course, aware that the paragraph in a lay contemporary of the 2nd instant was written by Dr. Herbert Tibbits, or that he was responsible for the statement, concerning electricity, to which we particularly took exception—namely, that "owing chiefly to its application being *troublesome* and *tedious*, and *requiring patience* and *sacrifice of time*, the belief in its efficacy is theoretical rather than practical with the great majority of the medical profession"! The italics are ours.—ED. L.

ARMY MEDICAL DEPARTMENT.

To the Editor of THE LANCET.

SIR,—I trust you will permit me to trespass on your space in reply to "Y.'s" criticisms on my letter, that appeared in your issue of the 3rd instant.

"Y.," in his efforts to show that my letter "is not a model of close reasoning,"—which it never pretended to be, by the way—deals with six of the seven points I enumerated as some of the advantages the Army Medical Service gains by the recent Warrant. The seventh—viz., the restoration of forage—he admits is an undoubted grievance remedied.

"Y" also acknowledges that pay and pensions have been solidly increased, and there he is certainly correct; but parenthetically he remarks that increase of pay was not asked for. The parenthesis is not accurate, for increase of pay was recommended by more than one Medical College and School in the United Kingdom, when their governing bodies were requested, by Lord Cranbrook's Committee, to state the causes of the unpopularity of the Service with young medical graduates. Besides, reference has only to be made to your columns to see that many writers, as well as the profession generally, did ask for higher pay for army surgeons. The point is conceded by the new Warrant, and it is probable that most medical officers regard an addition to their emoluments, of about £45 per annum in the majority of instances, as not only worth having but also worth suitably acknowledging without going the length of the "gushing gratitude" that "Y." speaks of.

The increase of pension is most notable after twenty years'

service. It has been raised from 12*s.* to 20*s.* per diem, and is a boon that the officers of the department have regarded as a *summum bonum* for the last twenty years or more. If "Y." can point to an equally good retirement in any other department of the army I am much mistaken.

It is not easy to reason with mere assertion, and "Y.'s" statement that retired medical officers will still be subject to Whitehall-yard, will be restricted to residence in these islands and debarred from the privilege of commuting their half-pay, I can only meet by asking him to be so good as to quote his authority for it.

It is true officers who retire before the age of fifty-five are liable, till they reach that age, to be called on to serve in cases of national emergency. It is possible that is what "Y." considers being "still subject to Whitehall-yard." If it is, I can only say I know no medical officer who would, under such circumstances, act with less loyalty and patriotism than was shown by the rank and file of the reserve forces in 1878. For the residence restricted and the commutation debarred I am not able to find any clause in the Warrant, and until some authority is given I must regard the statement as without foundation.

Sick leave, "Y." says, has been *nominally* extended, but he adds, "a medical officer cannot claim the privilege on the decision of the Medical Board." Neither can any other officer. Medical Boards have only the power to recommend that leave be granted. The Commander-in-Chief grants the leave. Before November 27th, 1879, Medical Boards could not recommend more than six months' leave for medical officers; but clause 44 of the Warrant expressly states that, on the recommendation of the Director-General, such sick leave may be extended for a second period of six months on full pay. Such an act of justice was beyond the power of the authorities prior to the appearance of the Warrant.

"Y." asserts that exchanges were allowed before the date of the Warrant, and here again he compels me to point out to him an inaccuracy. It is notorious in the department that exchanges have not been permitted for some time past, save under exceptional circumstances, and clause 33 of the Warrant specially provides for their sanction in the future.

"Y." is singularly fortunate in having been so well acquainted with the terms of Indian service that qualify for promotion to the administrative ranks before the Warrant made them officially known. Clause 21 of the Warrant is the first official intimation the Department has received on the subject as far as I am aware.

"Y." affirms that soldier servants were allowed prior to the Warrant. Were they? How? When? Where? The conditions of service in the Army Hospital Corps distinctly forbade the employment of the men as officers' servants, and if a medical officer could not obtain a servant from his own corps, I know not how he could get one from another. It has happened several times within my knowledge that medical officers have endeavoured to get servants and have failed. Clause 10 of the instructions by the Secretary of State on the Warrant grants medical officers the option of employing soldier servants from the Army Hospital Corps, or drawing the allowance if they prefer to do so.

That, I think, is the last of "Y.'s" criticisms that concerns me, saving those he passes on the quotations I ventured to make. While I regret that "Y." fails to see their application, I cannot take up your space in explaining them to him; but it is unfortunate he should have troubled himself about them, since he confesses his inability to apply them.

I am, Sir, your obedient servant,

Jan. 12th, 1880. VERAX.

NAVAL MEDICAL DEPARTMENT.

To the Editor of THE LANCET.

SIR,—Now that important concessions have been granted to the Army Medical Service, to rescue it from the lamentable condition into which it had fallen, it is time something were done for the Naval Medical Service, which is fast drifting into the same state.

The conditions of life are so much more irksome and disagreeable on board ship than they are on shore, that, to obtain men of equal abilities, a higher rate of pay and better retirement must be given to the naval man than to his brother officer in the army.

One great cause which has prevented men from coming into the navy has been the want of faith shown by the Admiralty in not carrying out the promises given in their Circulars from time to time. Admiralty Circular dated the 7th of October, 1875, and headed "for information of candidates," states, in Paragraph 2: "Fleet Surgeons rank with Commanders according to date of commission"; and, again, in Paragraph 7: "Medical officers have cabins according to their relative rank in the service."

Now, this Circular, issued in 1875, has never been put in force. After four or five of the best cabins have been selected and marked for certain officers, the medical officers have then their choice, according to seniority. In H.M.S. *Euryalus*, the flagship on the East Indian station, the commander, paymaster, navigating officer, chaplain, bandmaster, and captain's steward have cabins on the main deck, whilst the old, white-headed fleet surgeon, who is years senior to all the officers mentioned, is delegated to a cabin on the lower deck, where the scuttle can never be taken out at sea, and where it is impossible for a man advanced in years to live without serious injury to his health.

Two fleet surgeons have already been invalided from that ship in eighteen months, and it is stated that the third, who has just gone out, is not likely to last long.

The same conditions as to cabins obtain in several other ships, such as the *Boadicea*, *Bacchante*, *Pallas*, *Hercules*, and many more, where the paymaster, navigating officer, and chaplain, if of only one day's standing, get cabins before the fleet surgeon, no matter how many years seniority he may have.

It is now time that something was done about this question, the above-mentioned Circular, as it now stands, being simply an attempt to lure under false pretences young medical men into the naval service.

Your obedient servant,

January 14th, 1880. ARGOSY.

BIGELOW'S OPERATION.

To the Editor of THE LANCET.

SIR,—I should be obliged if you would allow me to supply an omission, for which I owe an apology to Sir Henry Thompson.

In a clinical lecture published in THE LANCET of January 10th, I enumerated, as I imagined, all instances that had been recorded of the performance of Bigelow's operation by English surgeons.

The largest group of cases—namely, thirteen—by Sir Henry Thompson escaped my notice; they were published in the *British Medical Journal* for August 2nd, and they form part of the collection of thirty-one cases referred to by Sir Henry in last week's LANCET. I regret that I should have omitted to mention these cases, but it was due to my absence from this country at the time they appeared.

I am, Sir, yours, &c.,

Stratford-place, W., Jan. 19th, 1880. THOMAS SMITH.

"THE SUNNY SOUTH."

To the Editor of THE LANCET.

SIR,—Your article in THE LANCET of the 29th of December, on the so-called "Sunny South," would lead those at home to think we were having an exceptionally severe winter, whilst, on the contrary, we have had up to this, with the exception of one or two days, the most beautiful weather I have ever known. Neither lemons nor oranges have been injured here; and, as an instance of the mildness of the climate, I may mention that two weeks ago peas in full blossom were to be seen in an open field in the East Bay. It is quite true that the Princess of Monaco was interred during a snowstorm, but then it was of very short duration, the snow disappearing almost as soon as it fell, and differing in this respect from many of the other health resorts on the Riviera.

During the month of December we have had twenty-six bright sunny days, two on which rain fell, one snow and two cloudy; on only two nights did the thermometer go below freezing point, and then only one or two degrees. The mean daily temperature has been 46·3° Fahr.; maximum in shade 59°; minimum 30°.

The six days of the new year have been very beautiful; and indeed, looking back on the past three months, I do not think we have had six days on which the greatest invalid

could not have sat with pleasure and advantage basking in the sun in the beautiful gardens of the Casino here.

I am, Sir, faithfully yours,

Monte-Carlo, Jan. 7th, 1880. T. HENRY PICKERING.

AN ITALIAN SCOURGE.

(From a Correspondent.)

NINETY-SEVEN thousand Italians (so I gather from the Report lately issued by the Minister of Commerce and Agriculture) are at this moment dying of pellagra. About one-half of the provinces of Italy are desolated by this scourge. The number of the victims represents 3·62 per 1000 of the total population of the Peninsula, or 0·21 per 1000 more than the worst cholera epidemic that ever swept over France. If we restrict our consideration to the infected regions only, the proportion becomes still more terrible, and oscillates between a maximum of 11·76 per 1000 in Lombardy, 11·08 per 1000 in Venetia, and a minimum of 0·09 per 1000 in Latium. In France, in the cholera visitation of 1834-35, the proportion in the infected departments only was 10·42 per 1000 of the population for the sick, and 4·73 per 1000 for the dead.

From the Mantuan Commission appointed to inquire into the subject I gather that pellagra, considered *per se*, is so extended and so manifold in its symptoms as to appear —so far as its external phenomena are concerned—a general malady of the organism. Its developments are principally found on the skin, the mucous membrane of the mouth and the entire alimentary canal, in the muscular system, and in the nervous system in its threefold sensory, motor, and psychical relations. For the most part its victims betray the first inroads of the disease by stupefaction, giddiness with a sense of traction from behind, and a general enfeeblement of the organism. On the approach of spring the parts of the skin most exposed to the sun, the backs of the hands and feet, the face, the neck, and the median part of the chest at the parting of the shirt, show an erythematous discolouration, with desquamation of the cuticle, and more rarely, in the severer cases, rough nodosities, vesicles, and puckerings. Corresponding characteristic alterations manifest themselves later in the mucous membrane of the lips, the mouth, and the fauces, and then there supervenes a profuse, obstinate, exhausting diarrhœa. The patient, becoming always feebler, is no longer fit for the slightest exertion; he totters rather than walks, with knees semiflexed and curved, till finally he falls forwards and lies with his mouth in the dust. The skin of the entire body becomes of an earthy colour and hangs in loose folds, the muscles are attenuated, and the whole person becomes lean or emaciated, if indeed he does not rather acquire a tumefaction, down-dragging and semi-transparent, from the infiltration of the subcutaneous tissue with serosity. The *pellagrosi* complain for the most part of a pain as if from contusion on the head and spine, which often radiates in zones around the abdomen and is prolonged to the thighs; of a formiculation and sense of heat at the extremities, and of an internal tremor often visible in the hands and tongue. They have often a burning sensation in the stomach, ascending the œsophagus; while not unfrequently there is laboured breathing which sometimes approaches absolute apnœa. The sight becomes clouded, the hearing first troubled with rumbling noises and then blunted. The heart's impulse gets weaker and diminished in bulk as the organ sometimes shrinks along with the other muscles; the radial pulse is feeble and generally rapid, with venous stasis indicated by the diffused leaden colour, mottled with sporadic sanguineous blotches, sometimes small sometimes large, on the skin and mucous membrane. In many cases of pellagra, sometimes from the beginning, occasionally later in the progress of the disease, there is mental alienation, which may break out in sudden paroxysms and assume every form, from laughing and loquacious maniacal exaltation to the gloomiest and fiercest melancholy, with suicidal, incendiary, and homicidal tendencies. More often, however, it begins with hebetude or slowing of the intelligence, and a prostrate apathy of mind which becomes true lypemania with stupor, and betrays itself in delirious words and deeds, in fear of persecution and in hopeless despair.

Pellagra runs, usually, a slow course, lasting for years, during which it betrays itself in attacks which may continue for months, and which occur most often in spring and summer, less frequently in winter, and still less so in autumn, and which recur always at the same season in successive years, with graver and more extended virulence. Like every other malady, pellagra renders the system more liable than it would otherwise be to noxious influences; and so it frequently happens that in its progress other common maladies supervene, especially those of the respiratory organs. It is computed that in more than one half of the cases of death among the pellagrous, intercurrent disease of the lungs is the proximate cause. But, independently of that, there are cases of pellagra in which it assumes an acute form, either from its commencement or in a more or less advanced state of its chronic course. The malady then takes in some measure the aspect of typhoid (*tifo-pellagroso*), and is generally fatal. In these cases, as in those of a persistently slow course, death most often happens from an intractable diarrhœa, which has exhausted the patient.

The grand cause of this frightful malady is the exclusive consumption, as food, of maize generally in a deteriorated condition, while minor or concurrent causes are the excessive labour to which the Italian rustic is subjected, and the unhealthiness of the hovel in which he lives. "Bad alimentation, bad lodging, excessive work,"—it is to these that with monotonous persistency the sanitary returns attribute the epidemic. The remedy belongs, therefore, to the State rather than to medicine, and obviously consists in so improving the material condition of the Italian labourer as to enable him to earn more and to live better, as regards food, dwelling, and occupation. According to the suggestions of the Commission, his wages can only be heightened by diminishing competition, and competition is to be diminished by encouraging emigration. Having thus reduced the number and enhanced the earnings of the labourers, the Government should next make it compulsory on their employers to provide salubrious houses for them. Under these conditions of better fare and superior home-comforts pellagra would be reduced to the proportions of a sporadic and occasional skin disease, which the physician could treat with some prospect of success. Till they are provided, however, the scourge will prevail unchecked, and the malady remain an opprobrium, not of the healing art, but rather of the State.

Obituary.

WILLIAM BUDD, M.D.

DR. WILLIAM BUDD was born at North Tawton, in Devonshire, in 1811; his father was a medical practitioner of high repute, and he himself was one of a distinguished family of nine sons, seven of whom entered the medical profession. It is worthy of note that five members of this family were Wranglers.

During the period of his medical education Dr. Budd spent four years in Paris, at the Collége de France and the Ecole de Médecine, and also studied in London and Edinburgh, and in 1839 he obtained his degree at the University of Edinburgh, carrying off the gold medal for his essay on Rheumatic Fever. After this he was appointed physician to the *Dreadnought*, and about this time published in the Medico-Chirurgical Transactions a paper on the Symmetry of Disease, which attracted considerable notice. Soon after coming to Bristol he was appointed physician to St. Peter's Hospital, and in 1847 obtained the post of physician to the Bristol Royal Infirmary, which he held till 1862, when he was made consulting physician to that institution. For some years he occupied the chair of Medicine at the Bristol Medical School. In 1870 he was made a Fellow of the Royal Society. At length his incessant activity of body and mind began to tell upon him, and about seven years ago he was forced to retire from professional life. The rest which he thus obtained, however, did not restore him to health, and gradually increasing weakness resulted in his death at Clevedon, on the 9th inst., in his seventieth year.

After settling in Bristol, Dr. Budd speedily obtained a large practice and a very wide reputation as a consulting

physician. His rare ability was universally acknowledged and appreciated by his professional brethren. His extensive learning and great practical knowledge of disease, the clearness of his mental vision, and the strength of his convictions, together with the logical force with which he urged them, combined, with his natural kindliness of disposition and his unusual power as an orator, to make him the centre of professional life, a leader of professional thought and activity.

Dr. Budd contributed numerous able articles on subjects of importance to the pages of this journal, and to other periodicals and reviews; but the world-wide reputation he achieved rests chiefly upon his researches in the pathology and mode of dissemination of typhoid fever. His classical work on "Typhoid Fever, its Nature, Mode of Spreading, and Prevention" (published in 1873), is a striking instance of the practical application of strict scientific methods of induction to the elucidation of the complex problems presented by disease. To Budd belongs the lasting honour of proving beyond dispute that typhoid fever is a "contagious or self-propagating fever, and is a member of the great natural family of contagious fevers, of which small-pox may be taken to be the type;" and that "the contagious matter by which the fever is propagated is cast off chiefly in the discharge from the diseased intestine." Liebermeister (Ziemssen's Cyclopædia, art. Typhoid Fever, p. 51,) says, "The opinion that the poison of typhoid fever is propagated continuously and never originates autochthonously was first established by Budd." In his work above mentioned Dr. Budd gives convincing proof of the mode of spread of typhoid fever. One of the most remarkable instances is afforded by the outbreak of the fever at North Tawton, and its spread to certain adjacent villages solely through proved sources of contagion. The mode in which the spread of this epidemic is worked out cannot but excite the admiration of the reader. Dr. Budd then goes on to prove that the discharges from the intestine contain the specific contagious matter. He regards the intestinal lesion as the special *rash* of the disease. He traces by the convincing evidence of outbreaks of the fever its propagation through the medium of drinking water, but also adduces indisputable proof of the conveyance of the specific poison by sewer-contaminated air; and says that the worst outbreaks he has witnessed have occurred where the water has been absolutely blameless. He also gives instances of infection through other agencies; such as hands, bedding, and clothes, and calls attention to the danger resulting from the fact that "the *sewer* has come to be looked upon as the actual and primary source of the disease, while the infected *man* has been altogether lost sight of." Having thus demonstrated the contagious nature of the fever, and the mode of its spread, with the practical thought so characteristic of the writer, he says, "Science passes into duty," that duty being to carry out in the most thorough manner the process of disinfection. The work concludes with a most forcible argument against the "pythogenic" theory of the origin of the fever. Dr. Budd points out that one positive case is worth many negative, and that the absence of proof of infection in a given instance is not special to typhoid fever, but is frequently met with in, e.g., small-pox, and that consequently variola may just as logically be held to originate *de novo*; and he contrasts the long-continued and entire immunity from typhoid fever amid the impurities to which it is commonly ascribed, with its intense virulence when once introduced.

Dr. Budd is also well known in connexion with the subject of cholera. As in typhoid fever, so in cholera, he held that the dejecta contained the contagious matter, and that by a proper disinfection of the stools in all cases, an outbreak of cholera could be absolutely arrested. In proof of this, in a pamphlet on "Asiatic Cholera in Bristol in 1866" (published in 1871), he contrasts the various epidemics which have occurred in Bristol, and points out that, whereas in 1849 the deaths were 1979, in 1866 they were only 29; that whereas in previous epidemics the disease had spread widely from points where it first appeared, in that of 1866 it did not spread, although it was introduced in twenty-six distinct localities, and was of a specially malignant type. The success with which this epidemic was stamped out in Bristol was due solely to the energetic carrying-out of the measures which Dr. Budd so strongly insisted upon as the result of his views as to the mode of spread of this disease.

On the subject of the contagious diseases of animals Dr. Budd also made valuable observations. In 1803 he published a pamphlet on "Variola Ovina, Sheep's Small-pox; or the Laws of Contagious Epidemics, illustrated by an Experimental Type." He also studied a disease which caused a fatal epidemic amongst pigs, and concluded that it was of the nature of typhoid fever, and could be arrested by the slaughter of the affected animals. It is well known that when the cattle plague first appeared in England Dr. Budd strongly held that it could and ought to be stamped out by killing all animals as soon as the earliest symptoms appeared, and that this opinion, although at first held up to ridicule in the columns of the *Times* "as the Pole-axe Theory of Dr. Budd," ultimately triumphed. In speaking of this method, its author was wont to say that any contagious disease, such as scarlet fever, could thus be utterly exterminated, if only the same line of action could be adopted.

In the later years of his professional life Dr. Budd was employed in the investigation of various questions of much interest, such as the contagious nature of phthisis and the prevalence of diabetes in certain localities; but it was not permitted to him to work out the theories he had been led to form.

From a review of his life's work, it is manifest that Dr. Budd's best energies were devoted to the furtherance of preventive medicine, and of few men can it be said that they have effected more for the welfare of the human race than has been done by the truly great man who has taught us how we may deal fearlessly and surely with foes that formerly gained power and terror from the mystery in which they were shrouded.

LEICESTER CUTHBERTSON PONSFORD.

MR. PONSFORD, whose decease at the early age of twenty-three, from blood-poisoning caught while in the discharge of his duties as physician's assistant to Dr. Wilson Fox at University College Hospital, was one of the most promising men of his year in his school. He obtained high honours at the 1st M.B. Examination at the University of London, and was preparing to take the full degree in November next. He wounded his finger at a post-mortem examination in November last, and for several weeks his symptoms were very obscure, but at length blood-poisoning clearly developed and proved fatal. We cannot but regard the loss of such a life in such a manner with the deepest regret.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having passed the required examination for the diploma, were duly admitted Members of the College at a meeting of the Court of Examiners on Monday last:—

Bothamley, W. Parkinson, L.S.A., Donnington, Lincolnshire.
Davis, Arthur Randall, L.S.A., Langport, Somerset.
Fagg, Thomas William, L.S.A., Aldham, Kent.
Favell, Richard, L.S.A., Sheffield.
Greensill, Joseph Moore, L.S.A., Whitley, Starpoint.
Heaven, John Cooksley, L.S.A., Bristol.
Heygate, Frederick Nicholas, L.S.A., West Haddon.
Irvin, Joseph Henry, L.K.Q.C.P. Irl., Longridge, Preston.
Mulroney, Thomas Richard, L.R.C.P. Ed., Bombay.
Pegge, William Joseph, L.S.A., Newton-heath.
Seale, Thomas William, L.S.A., Aberdare, South Wales.
Todd, George Dixon, Leeds.
Webb, William Wilfrid, L.S.A., Uxbridge, Middlesex.
Wigg, Alfred Edgar, Adelaide, South Australia.
Williams, William, L.S.A., Aberdare, South Wales.
Wood, James, Wigan, Lancashire.

The following gentlemen were admitted Members on Tuesday last:—

Allen, Francis Edward, Upton-on-Severn.
Armitage, Joseph, St. John's-wood.
Boulter, Walter Ernest, Manchester.
Brooks, H. A. Grundy, Kennington-park.
Chipperfield, T. J. B. Pearse, L.R.C.P. Ed., Twickenham.
Fowler, Charles Henry, East Kirkby.
Haggard, Robert, Leeds.
Jones, W. H. Fenton, Euston-road.
Lewis, G. Stephens, L.R.C.P. Lond., Hobart Town.
McKee, G. M. Eccles, Hammersmith.
Mead, Charles, Falmouth.
Oglesby, Joseph William, L.S.A., York.
Parish, Frank, L.R.C.P. Ed., Erith, Kent.
Reynolds, James Jones, Appledore, Devon.
Richardson, James Nowell, Leeds.
Roberts, Oswald, Richmond, Yorkshire.
Rich, Evelyn Arthur, L.R.C.P. Lond., Winchester.
Theed, Stanley Vipan, L.R.C.P. Ed., Hilton, near St. Ives.
Warren, H. G. Seymour, Orange, New South Wales.
Webber, W. Woolmington, Crewkerne, Somerset.
Whitehouse, John, L.R.C.P. Ed., Birmingham.
Withers, Oliver, Sale, near Manchester.

The following gentlemen were admitted Members on Wednesday last:—

Back, Alfred Henry, Hethersett, Norfolk.
Bartlett, Charles Richard, Cheltenham.
Bates, Henry Leslie, L.R.C.P. Lond., Streatham.
Beresford, Charles William, Buxton.
Biss, Cecil Yates, Sydenham.
Breese, Thomas Thwaites, L.S.A., Norwich.
Cree, Edward Russell, L.S.A., St. John's-park, N.
David, W. Washington, L.S.A., Cymer, South Wales.
Dixon, Harry Alcock, Burnley, Lancashire.
Evans, Ebenezer Daniel, Wrexham.
Groom, Henry Thomas, L.S.A., Camden-road.
Harvey, Sidney Frederic, Clapham-road.
Hebbert, Charles Alfred, Birmingham.
Hormasdji, Robert Nesbit, Bayswater.
Hunter, Vere Edward, Cromwell-crescent.
Knipe, F. A. Patrick, Malvern.
Little, Ernest Muirhead, Park-street.
Mort, Herbert Brownlow, L.R.C.P. Lond., Southport.
Shorland, W. Edmund, Bristol.
Smith, F. M. Coddé, Fareham, Hants.
Swale, Harold, L.S.A., Guildford.
White, W. Hale, Carshalton.
Wightwick, Fallon Percy, Folkestone.

The following gentlemen passed the Primary Examination in Anatomy and Physiology at a meeting of the Board of Examiners on the 15th inst.:—

Herbert A. H. McDougall, James J. Short, and James H. Breach, King's College; Americ E. Flaxman, Middlesex Hospital; John A. Coutts and Francis W. Humphery, St. George's Hospital; Richard S. Wright, St. Mary's Hospital; William J. Hill, St. Bartholomew's Hospital; William Growse, Guy's Hospital; Harry Gravely, University College; Edward Mattie, St. Thomas's Hospital.

Of the 140 candidates examined during the past fortnight, 42 failed to satisfy the Board of Examiners, and were referred for three, and 9 candidates for six months' further anatomical and physiological study.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Jan. 16th:—

Heygate, Frederick Nicholas, West Haddon, Rugby.
Jago, Edwin Osborne, Plympton, Devon.
Whelan, John Joseph, Grafton-terrace, Maitland-road.

The following gentleman on the same day passed the Primary Professional Examination:—

Davies, Jenkin, St. Thomas's Hospital.

THE Drapers' Company have granted a donation of fifty guineas to the Parkes Museum of Hygiene.

HIS Royal Highness the Duke of Connaught will preside at the sixty-sixth anniversary dinner of the Royal Hospital for Diseases of the Chest, City-road, to be held at Willis's Rooms, on Wednesday, 21st of April.

THE Coronership of the Borough of Guildford is vacant by the resignation of Dr. James Remington Stedman. The election of his successor has been fixed for Tuesday, the 10th of February.

AT the quarterly meeting of the Directors of the Naval Medical Supplemental Fund, Dr. H. J. Domville, C.B., Inspector-General, in the chair, the sum of £70 was distributed among the various applicants.

MR. HENRY J. L. GRAHAM, who has filled the office of Principal Secretary to the Lord Chancellor since 1874, has been appointed by the Lord Chancellor to succeed Mr. Barlow as Master in Lunacy, which office Mr. Barlow has resigned.

UNIVERSITY OF DUBLIN.—The Lord Chancellor of Ireland has been appointed Vice-Chancellor of Trinity College, Dublin.

THE BLANE MEDAL.—The biennial adjudication of the gold medal founded by Sir Gilbert Blane, Bart., physician in ordinary to George III., has just been made in favour of the following gentlmen—viz., Staff Surgeon Henry Frederick Norbury, C.B., M.R.C.S. Eng. and L.S.A., of H.M.S. *Active*, and Staff-Surgeon William Digby Longfield, L.R.C.P. Ireland, of H.M.S. *Tenedos*. The adjudicators were Dr. Bennett, President of the Royal College of Physicians, Mr. Luther Holden, President of the Royal College of Surgeons, and Sir Alexander Armstrong, Director-General of the Medical Department of the Royal Navy. The medal, which is of the value of ten guineas, is very handsome, having on the obverse a striking likeness of the donor in bold relief, and on the reverse, a wounded sailor falling into the arms of a comrade, the name of each recipient being engraved in the legend.

MEDICAL SOCIETY, COLLEGE OF PHYSICIANS IN IRELAND.—A meeting of the members of this Society was held last week to consider certain rules in connexion with this Association. Some slight changes were adopted, in reference to the admission of members, annual subscription, and office-bearers to be elected; but it is understood that they are not to become law until sanctioned by the College. It is possible that the resolution adopted by the College last June, that any member joining the Society after that date should not be permitted access to the reading-room, will be rescinded.

Medical Appointments.

ALLEN, J. G., L.K.Q.C.P.I., has been appointed Certifying Factory Surgeon for the District of Rich-hill, co. Armagh.

BALBIRNIE, J. P., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Certifying Factory Surgeon for the District of Dalton-in-Furness, Lancashire.

BELL, Mr. J. C., has been appointed Public Analyst for the Borough of Stalybridge, at £10 10s. per annum, and 10s. 6d. per analysis beyond ten.

BERRY, G. A., M.B., C.M., has been appointed Junior House-Surgeon to the Royal London Ophthalmic Hospital, vice Burnham, promoted.

BLUETT, J., M.R.C.S.E., L.S.A.L., has been reappointed Medical Officer of Health for the Chesterfield Urban Sanitary District, at £100 for one year.

BOND, C. J., M.R.C.S.E., L.R.C.P.L., has been appointed Resident Surgeon to the Bedford General Infirmary, vice Pickup, resigned.

BURMAN, C. C., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer to the Fern Island Light Establishments, vice Broadbent, resigned.

BURNHAM, G. H., M.B., M.R.C.S.E., has been appointed Senior House-Surgeon to the Royal London Ophthalmic Hospital, vice Gunn, resigned.

CARLYLE, J., M.B., C.M., has been appointed Certifying Factory Surgeon for the District of Dyce, Aberdeenshire.

CLUBBE, C. P. B., L.R.C.P.L., M.R.C.S.E., has been appointed Senior Resident Medical Officer to the Hospital for Sick Children, Pendlebury, Manchester, vice Watson, resigned.

DEWAR, J., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Physician to the Hospital for Women and Children, Vincent-square.

FORBES, D., M.B., L.R.C.S.Ed., has been appointed Assistant Medical Officer to the Workhouse, Brownlow-hill, Liverpool, vice Eccles, resigned.

GRIFFITH, G. R., M.B., C.M., has been appointed Medical Officer and Public Vaccinator for the Carnarvon No. 1 District of the Carnarvon Union, vice Foster, deceased.

HAYES, T. E. D., L.K.Q.C.P.I., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer and Public Vaccinator for the Bodiam District of the Ticehurst Union, Sussex, vice MacKeith, deceased.

HELME, J. M., M.D., C.M., has been appointed a House-Surgeon to the Edinburgh Royal Maternity and Simpson Memorial Hospital, for three months from the 1st of February.

HUNT, H. J., L.R.C.P.L., has been appointed a Medical Officer to the Harrogate Bath Hospital.

JONES, A. L., M.R.C.S., L.S.A.L., has been appointed House-Surgeon to the London Hospital.

JONES, H. P., M.R.C.S.E., L.K.Q.C.P.I., & L.M., has been appointed Medical Officer and Public Vaccinator for the Aberffraw District of the Holyhead Union, vice Owen, deceased.

MARSHALL, J., L.R.C.P.L., M.R.C.S.E., has been appointed a Surgeon to the Dover Hospital and Dispensary, vice Duke, resigned.

MYRTLE, A. S., M.D., L.R.C.S.Ed., has been reappointed Physician to the Harrogate Bath Hospital.

PRATT, J., L.K.Q.C.P.I., L.R.C.S.I., has been appointed Certifying Factory Surgeon for the District of Markethill, co. Armagh.

REED, W. H., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer and Public Vaccinator for the Donhead District of the Tisbury Union, Wilts, vice Bey, resigned.

RENDALL, S. M., M.B., C.M., M.R.C.S.E., has been appointed a House-Surgeon to the Edinburgh Royal Maternity and Simpson Memorial Hospital, for three months from the 1st of February.

SAINSBURY, H., M.B., has been appointed Junior Resident Medical Officer to the Hospital for Sick Children, Pendlebury, Manchester, vice Wood, resigned.

SHAPLEY, F., M.R.C.S.E., L.S.A.L., has been appointed House-Surgeon at the London Hospital, vice Batchelor, resigned.

SIMPSON, W. S., M.R.C.S.E., L.R.C.P.Ed., & L.M., has been appointed Medical Officer to the Pontefract Union Workhouse, vice Atkinson, resigned.

SMITH, H., L.S.A.L., has been appointed a Resident Clinical Assistant to the Hospital for Consumption and Diseases of the Chest, Brompton, vice Keogh, resigned.

SMYTH, Dr. P., has been appointed Medical Officer, Public Vaccinator, &c., for the Stamullen Dispensary District of the Drogheda Union, co. Louth, at £110 per annum and fees, and £20 per annum as Medical Officer of Health, vice Adrien, resigned.

SOMERVILLE, W., M.D., has been appointed a Medical Officer to the Harrogate Bath Hospital.

SWANN, A., M.D., M.R.C.S., &c., has been appointed Honorary Surgeon to Batley and Districts Cottage Hospital, vice McFadden, resigned.

SWETE, H., M.D., has been appointed Third Physician to the Worcester General Infirmary.

WEBB, W. W., M.R.C.S.E., L.S.A.L., has been appointed Junior Resident Medical Officer to the Great Northern Hospital, vice McMunn, resigned.

WELCH, H., M.B., C.M., has been appointed a Junior House-Surgeon to the Royal Southern Hospital, Liverpool, vice Helme, appointed a House-Surgeon to the Edinburgh Royal Maternity Hospital.

Births, Marriages, and Deaths.

BIRTHS.

CURRIE.—On the 7th inst., at Lydney, the wife of Andrew S. Currie, M.D., of a daughter.

DAVSON.—On the 15th inst., at Mount Galpine, Dartmouth, the wife of Frederick Adams Davson, M.D., of a son.

JACKSON.—On the 18th inst., at Ladbroke-grove, Notting-hill, the wife of Robert Alexander Jackson, L.R.C.P.I., of a son.

KAROP.—On the 15th inst., at Holland-road, Kensington, the wife of George C. Karop, M.R.C.S.E., of a son.

SHELDON.—On the 19th inst., at Cornwall-road, Notting-hill, the wife of Thomas Sheldon, M.D., of a daughter.

MARRIAGES.

GOWING—WELCH.—On the 14th inst., at St. Thomas's Church, Salisbury, by the Rev. C. N. Wyld, assisted by the Rev. L. Ridley, B. C. Gowing, M.R.C.S., to E. R. H. Welch, of Salisbury, second daughter of E. Welch, of Liverpool.

RENDALL—KILBURN.—On the 15th inst., at St. George's, Hanover-square, John Rendall, F.R.C.S.E., to Margaret, widow of F. Kilburn, Esq.

DEATHS.

CRAWFORD.—On the 17th inst., at Norton-terrace, Longsight-road, Manchester, James Crawford, M.D.

EDDOWES.—On the 17th inst., at Sandymount, William Eddowes, M.R.C.S.E., Surgeon-Major, 35th Bengal Native Infantry, aged 48.

FOSTER.—On the 3rd December, Thomas Sheldon Foster, L.R.C.P.I., of Carnarvon.

GILL.—On the 9th inst., at Kandy, Ceylon, George T. Gill, L.R.C.P.Ed., Assistant Colonial Surgeon.

MASSY.—On the 15th inst., at Woodfort, Fermoy, co. Cork, Thomas Massy, M.D., aged 75.

OSMOND.—On the 9th inst., at Thorpe-le-Soken, Thomas Edward Osmond, M.R.C.S.E., aged 60.

ROE.—On the 4th inst., at Malta, Peter Mitchell Roe, L.F.P.S.G., Surgeon, Royal Dockyard, Malta.

N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*

BOOKS ETC. RECEIVED.

BAILLIÈRE & Co., London.
The Irish Medical Directory. 1880.

BAILLIÈRE ET FILS, Paris.
Conférences Pratiques de Médecine Légale. Par E. Clément.
Traité Clinique des Maladies de la Moelle Epinière. Par E. Leyden.

DAVID BOGUE, London.
Youth, its Care and Culture. By J. Mortimer-Granville.

G. CARLYLE, Liverpool.
Doctor's Prescription Book.

J. & A. CHURCHILL, London.
Pay Hospitals and Paying Wards throughout the World. By H. C. Burdett.

HODDER & STOUGHTON, London.
Economical Cookery for the Middle Classes. By Mrs. Addison.

W. & A. K. JOHNSTON, London.
Biological Atlas. By D. McAlpine & A. N. McAlpine.

H. KIMPTON, London.
Dentists and Dentistry. By A. Carter.

H. K. LEWIS, London.
Experimental Researches on the Regional Temperature of the Head. By Dr. J. S. Lombard.

LONGMANS, GREEN, & Co., London.
Two Lectures on South Africa. By J. A. Froude, M.A.

MACMILLAN & Co., London.
Eyesight: Good and Bad. By R. B. Carter.

G. P. PUTNAM & SON, New York.
A Dictionary of the German Terms Used in Medicine. By Dr. G. R. Cutter.

SMITH, ELDER, & Co., London.
The Essentials of Bandaging. By Berkeley Hill, M.B. &c.
St. Bartholomew's Hospital Reports. Vol. XV. 1879.

A. STEBBINGS, Lowestoft.
Sketches in Verse. By H. Gramshaw.

The Sunday at Home; January. The Leisure Hour; January. The Boy's Own Paper; January. (The Religious Tract Society.)—Auge und Schädel. Von Dr. E. Emmert. (M. V. von A. Hirschwald, Berlin.)—Brain: a Journal of Neurology. Part VIII. (Macmillan & Co.)—St. Louis Courier of Medicine; December.—Archives of Ophthalmology; December. (G. P. Putnam & Son, New York.)—Transactions of the American Ophthalmological Society. (Published by the Society.)—Transactions of the American Otological Society. (A. Williams & Co., Boston.)

METEOROLOGICAL READINGS.

(Taken daily at 8 a.m. by Steward's Instruments.)

THE LANCET OFFICE, Jan. 22nd, 1880.

Date.	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Dry Bulb	Wet Bulb	Solar Radia in Vacuo	Max. Temp Shade	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Jan. 16	29·05	S.W.	38	38	..	43	32	0·14	Overcast
,, 17	30·06	E.	36	34	..	38	33	0·17	Overcast
,, 18	30·06	E.	32	..	..	38	26	..	Fine
,, 19	30·39	E.	29	..	..	34	26	..	Overcast
,, 20	30·64	WNW	25	..	..	34	22	..	Foggy
,, 21	30·65	W.	27	..	..	37	21	..	Overcast
,, 22	30·39	W	32	..	..	40	34	..	Overcast

Notes, Short Comments, and Answers to Correspondents.

A NORTH WALES ELYSIUM.

WHILE from north, south, east, and west come innumerable lamentations of the severity of the weather, and even the winter-resorts on the coast of the Mediterranean offer but an imperfect refuge from it ("I am disabled from frost-bitten fingers," writes one artist from the land of the olive and myrtle), the Vicar of Llandrillo, Colwyn Bay (the Rev. W. Venables-Williams) writes to one of the Manchester journals giving a tantalising account of the local weather there. He tells us that his wife gathered sweet-peas in his garden eight days before Christmas-day, and that he himself the day before Christmas-day cut a large bouquet, consisting of roses, chrysanthemums, snap-dragons, wall-flowers, pansies, and violets. Not that the severity of winter has been unfelt at Colwyn Bay, but it has pressed there lightly as compared with many other places in the kingdom. Mr. Williams has had a ten years' experience of Colwyn Bay. He is accustomed there to cut asparagus in March, and to have regularly new potatoes on the 10th May; while as to flowers he is favoured with them all the year round. It is not surprising then that he suggests Colwyn Bay as a substitute for Cannes, Nice, and the south of England for northern folk who desire a winter-resort within an easy distance.

X. Y. Z.—The letter will be inserted in an early number.

DISTRIBUTION OF REWARDS FOR THE ZULU CAMPAIGN.

To the Editor of THE LANCET.

SIR,—Now that things appear to have been settled in Zululand, and senior officers who were incarcerated in Ekowe rewarded, I should like to know what is to be done for the junior officers and men who were in exactly the same position, and whose claims do not as yet appear to have been recognised, although some time has elapsed since they went through such hardships for their country. The senior combatant officer, I see, has been knighted, promoted, and loaded with other honours and rewards; the officer commanding the 3rd Buffs received a C.B.; the officer commanding the 90th Regiment a C.B.; the senior naval officer promoted, and a C.B.; and the senior naval medical officer promoted, and also a C.B. (the senior medical officer, Army Medical Department, not yet rewarded). From *Blackwood's Magazine* for last July it appears that the poor fellows were reduced to minimum field rations, eating beasts of burden, stricken with fever, and with deaths at the rate of over 100 per 1000 from disease alone; and considering the period of incarceration was only a few days less than the long-remembered and well-rewarded Lucknow, I feel sure, Sir, if this is permitted to meet the eye of those now in power, they, "on their deliverance from those great and apparent dangers wherewith they were compassed," will be substantially rewarded.

Your obedient servant,
Jan. 12th, 1880. AMICUS EXERCITUS.

Dr. Isalardi.—Doctors who so act would in this country be excluded from the societies of honourable physicians.

Medical Student.—Some preliminary acquaintance with pathology is desirable before clinical work.

Dr. Thos. Radford.—We have no knowledge of any communication of the class mentioned.

ECZEMA OF THE NIPPLE.

To the Editor of THE LANCET.

SIR,—In your last issue (p. 92, col. 2, line 33) Dr. Thin is reported to have said that my case died "two years after operation, without local relapse." If correctly reported, I must have omitted to inform him of the important fact that the "obscure symptoms" (line 39) with which she died were, to my mind, traceable to the fear of a second operation suggested by me, some six months before her death, for the removal of a line of cancerous nodules along the old cicatrix.

I am, Sir, yours obediently,
East Rudham, Swaffham, Jan. 17th, 1880. ALAN REEVE MANBY.

MIDWIFERY CONTRACTS.

THE *Cornish Telegraph* reports that in the Redruth County Court Mr. C. H. Butlin, Surgeon, Camborne, claimed 5s. from John Sims for bespeaking attendance on his wife in her confinement. His Honour asked if medical men could recover on retainers? Mr. Butlin said they could; it was a custom of the profession. Defendant said Mr. Butlin told him to go to someone else, as he could not pay the booking-fee of 5s. He did not get someone else, but an old woman attended his wife out of kindness. Mr. Butlin said never in his life did he refuse to come because the money was not paid. His Honour: It's not very likely. Judgment for plaintiff, payable 1s. a month.

Dr. Ingleby Mackenzie will obtain the information he desires by reference to our advertising columns.

H.—We believe the same publication exists.

TOBACCO-SMOKING.

To the Editor of THE LANCET.

SIR,—I have read with considerable interest the letters of Dr. Pratt and of the late lamented Dr. Parkes on the above subject in your issue of the 3rd inst. The growing prevalence of smoking in our midst, the frequency of the question, "Is smoking injurious?" and the discrepant answers which medical men too often give in reply, make it especially desirable that the question should be fairly discussed, and something like agreement arrived at. Indeed, for the credit of the profession, the subject should undergo careful consideration. We cannot expect to command the respect of the more intelligent part of the community whilst we are unable to agree amongst ourselves about one of the commonest problems offered for our solution. I fear, however, that the letter of Professor Parkes will do little towards settling public opinion on the subject. He seems strongly to incline to the opinion that "when tolerance has been established," he has "never been able to make out any symptoms which implied injury." It is evident, however, that he is far from being satisfied in his own mind. He says: "In conclusion, I confess myself quite uncertain," and further admits that his views are "very indefinite."

That there are cases of "enormous smokers" who apparently receive "no injury" will be readily admitted; others have met with them as well as Professor Parkes. It is precisely the same we learn with regard to opium-eaters. Some of these persons consume daily very large quantities, and yet enjoy health to a late period of life; apparently they receive no harm. Still more common are the cases of opium-eaters who, indulging moderately, and having acquired "a tolerance," seem to suffer no injury. But even if in these cases it could be positively shown that no injury results, there would still be sufficient evidence of the pernicious effects of opium-eating in the majority of those indulging in the habit to justify our denouncing it as injurious to health. It must be remembered that the effects of small doses of a poisonous agent, though frequently indulged in, may not show themselves for long periods. There are persons who have for years been accustomed to drink water containing the sulphates of lime and magnesia, and there are families in Cumberland whose domestic supply of water is said to be distinctly impregnated with As$_2$O$_3$, yet they seem to suffer little or nothing. So it is with impure air. Every sanitarian knows that owners of bad property and persons engaged in carrying on offensive trades deny that any harm results to health through their agency, and will readily bring forward instances where persons have enjoyed good health for long periods, though constantly inhaling the air which the medical officer of health emphatically condemns. The fact is that there are certain constitutions which are remarkably tolerant of obnoxious agencies, and seem to successfully defy what gradually undermines the constitutions of many others.

Now, must not all admit that tobacco-smoke, like so many other vapours, pollutes the air which the smoker breathes, and to that extent affects the health and vigour of his system? But it is alleged that smoking in moderation does no one any harm. Do we ever find any sanitary authority asserting that breathing an impure atmosphere in moderation does no one any harm? The plain unvarnished truth is that impure air always is injurious to the human system in proportion to the quantity which is inhaled. It is precisely the same as regards the use of tobacco; small doses do not apparently produce any ill-effects, but, for all that, ill-effects are produced, and, under frequent repetition, their specific effects become sooner or later apparent. Anyone desiring to know why tobacco-smoking is in the majority of instances so injurious would do well to consider the revelations of Drs. Vohl and Eulenberg. These gentlemen found amongst the gaseous products of tobacco-smoke, marsh gas, carbonic oxide, sulphuretted hydrogen, and hydrocyanic acid. The bases were nearly all found to belong to the picotin and pyridin series, known to be produced during the combustion of many vegetable substances. Pigeons and guinea-pigs exposed to the influence of these agents suffered from irregular cardiac action, tonic and clonic spasms, convulsions, and death. Other analysts, using possibly a tobacco richer in nicotin, such as is in common use in this country, have found that alkaloid in the smoke of tobacco. Thus it is not only that tobacco-smoke contaminates the air by particles of solid carbon or dust, but that there is diffused through the lungs of the smoker and those near him minute quantities of volatile poisons of the most virulent kind.

I have not space to refer to the seductive properties which the nauseous weed after a time exerts over too many of those who use it, nor yet of the relaxing effect which it too often exerts over the physical and mental faculties, leading to indolence, and too often creating the desire for a stimulant, and will briefly conclude by the following short but pregnant quotation on the subject under discussion:—"As it [tobacco-smoking] is of no use, and indeed injurious, by bringing men under the thraldom of a habit, it seems very desirable to discourage it" (Parkes' Practical Hygiene, second edition, p. 504).

I remain, Sir, yours &c.,

Manchester, Jan. 12th, 1880. H. M.

To the Editor of THE LANCET.

SIR,—The letter on Tobacco by the late Professor Parkes, given in your issue of the 3rd inst., certainly cannot be held to throw much light on the subject. The leading idea of the letter is that, "once tolerance is established," the use of tobacco in moderation does not appear to do any serious harm. There are, indeed, statements that go far to throw doubt upon this idea. The professor had not met with cases in which the giving up of tobacco seemed to do much good after it had been used for a considerable length of time. He speaks of parties suffering from various complaints who "were much better for leaving off smoking"—cases in which there "could be no doubt" the use of tobacco had an "injurious effect." But is it not a grave fact that in all cases, unless where there may be a decided hereditary predisposition, "tolerance" has to be "established"? Is not the *intolerance* which shows itself, when a healthy person smokes tobacco for the first time, *nature's protest* against the practice? Can that intolerance be overcome without injury to the system? Nature's protest against the use of tobacco is so universal amongst the healthy who attempt to smoke that it must be regarded as an emphatic condemnation of the practice. The simple fact that in every ordinary case "tolerance" has to be "established" before tobacco can be used without *obvious* evidence of serious injury should be enough to decide the question for ever, and justifies a high medical authority in saying that no tobacco-smoker is a thoroughly healthy man.

Yours &c.,

Jan. 1880. A. M.

To the Editor of THE LANCET.

SIR,—The view taken by the late Professor Parkes was similar in the main to the view so often put forth by advocates for the moderate use of alcoholic stimulants (which, like tobacco, are narcotics)—namely, that the evil lies not in the use, but solely in the abuse. Had Dr. Pratt consulted Dr. Richardson's "Diseases of Modern Life," he would not have been long in the dark as to the influence of tobacco. In that masterly work, the production of one who has devoted many years to the study of the question, may be found three chapters on the subject of Disease from Tobacco. Dr. Richardson deals with *facts* taken from extended and scientific observation; and the last three pages of the third chapter gives a *résumé* in the form of "Conclusions," which I consider any candid reader must deem conclusive against use of tobacco in any form.

Yours obediently,

Jan. 1880. MELIORA.

CONVALESCENT COTTAGE (THE PLAIN), EPPING.

THIS little convalescent home seems to be doing good work in a humble way. It is accessible to the East-end parishes. Since its opening, three or four years ago, 434 patients have been received; in the last year, 144. There are few greater luxuries or more binding duties than to support a convalescent home, even if it be a cottage.

THE WEATHER AT THE ISLE OF WIGHT AND AT THE RIVIERA.

To the Editor of THE LANCET.

SIR,—It may probably be interesting, considering the intense cold which prevailed in many parts of England and in France during the month of December last, to contrast the observations made at the several places of health-resort found in the south of England, and to that end I send you the results of the meteorological observations recorded at the Undercliff, Isle of Wight.

Both the months of November and December proved the finest on record for the last forty years. The weather during December, doubtless, was cold, but bears no comparison to the intense severity of the winter experienced in the centre of England and in France. The lowest temperature occurred during the night of the 4th, when the thermometer fell at Ventnor to 23°; at St. Lawrence to 22°; and at the Consumptive Hospital to 21·3°; so that at no period did the minimum reach 21°. The lowest maximum was also on the 4th, when the thermometer rose at Ventnor to 34°, and at the Consumptive Hospital to 33·5°. On the 3rd and 23rd the maximum was at 36°, and on the 1st and 2nd at 37°; so that on no one day did the thermometer continue at freezing-point during the twenty-four hours. The clearness of the atmosphere and the amount of bright sunshine during nearly the whole of the month was also remarkable. The number of days on which the sun shone, and that brightly, were 23, many of the days being perfectly cloudless; the sunsets beautiful, and the nights equally fine and clear. The amount of bright sunshine, at the most moderate calculation, amounted to 108 hours. The wind for the most part was from the north or east, but, in consequence of the absence of rain and the dryness of the atmosphere, did not partake of that piercing character too frequently the accompaniment of easterly wind. The rainfall during the whole month did not exceed one inch, 0·82 in. of which fell during the last four days. The mean temperature of the month was 37·90°, 0·59° above the mean of December, 1878. Doubtless much of the result thus obtained at the Undercliff, as regards tempera-

ture, is due to its insular position; its protection on the north by the range of high cliff, and down rising immediately behind it, the latter to a height of nearly 800 feet; its direct exposure to the south and the terraced nature of the ground, sloping as it does to the sea, and which, of course, gave the influence to the sun's rays that under ordinary circumstances could not have been obtained. Some few of the days were misty, but there was a total absence of fog.

Yours faithfully,

South Bank, Ventnor, Jan. 6th, 1880. J. B. MARTIN.

To the Editor of THE LANCET.

SIR,—Some actual experience of the weather in the Riviera may be interesting to your readers. On arriving from England ten days ago the transformation was marvellous. Within twenty-eight hours of my departure from London a blue sky showed itself as the train neared Marseilles, and brilliant sunshine has prevailed ever since from sunrise to sunset, except during part of two days. This letter is indited out of doors, under a cloudless sky, amid green vegetation, and the sound of birds and insects. Similar weather is said to have prevailed since the beginning of December. On the other hand, the precautions commonly advised must on no account be omitted by the invalid. He should utilise all the sunshine, and guard against the great changes of temperature. The best plan for most persons appears to be to keep in the direct rays of the sun, and shun the chill shade out of doors; to avoid spending time amongst the shops in sunless streets; to have an overcoat or shawl always in readiness; to be indoors quite half an hour before the treacherous hour of sunset. Rooms must be on the south side of the hotel, pension, or villa; the windows closed before sunset, that the apartment may retain its warmth. On chilly days, and for delicate persons on all days alike, the log-fire should be lighted in the afternoon. At Cannes, for instance, the residence should be on the ascent, above the ill-odours which are still too common near the sea-level. The custom, prevalent in hotels and pensions, of dining early in the evening, and then soon retiring, happily tends to insure a long night's rest for the invalid. When out of doors it is easy to get milk at unsophisticated prices at the numerous laiteries, where in the afternoon no milking can be seen.

Lastly, a hint for those who are able to choose the time of year for their holiday. Why not come to the sunny Riviera whilst the English climate is at its worst, instead of waiting to go away when the climate is pleasant at home?

Yours obediently,

Cannes, Jan. 12th, 1880. W. WILBERFORCE SMITH.

THE LEGALITY OF CHARGES FOR SERVICES BY UNQUALIFIED ASSISTANTS.

WE have been favoured by the Registrar of the County Court of Carnarvonshire with a copy of the judgment of Homersham Cox, Esq., in the case of Pring *v.* Dewitt. The learned Judge was courteous enough to wish the Registrar to forward the judgment to us, as of great interest to the profession. We regret that, owing to great pressure on our space, its insertion has been delayed. It is noticeable that the services in question were obstetric charges, and that the Judge makes no observation on this fact.

"The sole question on which I reserved my judgment in this case on Oct. 6th was whether a registered medical practitioner could recover for professional services rendered by his assistant, who was not registered. The plaintiff is a member of the Royal College of Surgeons. He sent his brother, a medical student, who assists him in his business, to attend a woman in her confinement. The brother duly attended the woman, and the plaintiff seeks to recover from her husband the charges for attendance and medicine. By the 32nd section of the Medical Act of 1858, it is provided that 'no person shall be entitled to recover any charge in any court of law for any medical or surgical advice, attendance, or for the performance of any operation, or for any medicine which he shall have both prescribed and applied, unless he shall prove upon the trial that he is registered under this Act.' In the case of Turner *v.* Reynall (14 C.B., N.S. 328, 32 L.J.C., p. 164) there was a decision on the construction of this section. The plaintiffs were partners; one of them was registered, but the other was not registered as an apothecary. It was held that they could recover for medicines and medical services rendered by the firm. If that case were upheld, I should infer that the plaintiff in the case before us could also recover; for if two partners can maintain an action for the service of one of them who is not qualified, it would follow that a sole plaintiff might recover for the services of his unqualified assistant. But this case of Turner *v.* Reynall is clearly overruled by the case of Leman *v.* Houseley (10 L.R., Q.B. 66). In the latter case Mr. Justice Blackburn says 'the intention of the Act was clearly to prevent unqualified persons from practising.' Mr. Justice Quain says that if the view taken in Turner *v.* Reynall 'were carried out, the essence and object of the Act would be defeated.' Mr. Justice Archibald adds: 'The intention of the Act was to enable the public to distinguish between qualified and unqualified practitioners.' I am of opinion that, having regard to this case of Leman *v.* Housely, and also to the necessity of preventing evasions of the Medical Act, the plaintiff cannot recover. There will, therefore, be a judgment for the defendant, with costs. But having regard to the conflict of authorities, and to the well-known fact that qualified medical men do very commonly depute their assistants to attend patients, I think this a very proper case for an appeal, and therefore, if the plaintiff chooses to appeal, I will give him every reasonable facility. Judgment for defendant with costs."

THE MUSEUM OF THE COLLEGE OF SURGEONS.

THE following circular has been issued by Professor Flower, the indefatigable Conservator of the Museum of the College of Surgeons, and to which we readily give insertion:—

"A new and thoroughly revised Catalogue of the Pathological Specimens in the Museum is at present in progress, its preparation having been entrusted by the Council to Sir James Paget, Dr. Goodhart, and Mr. A. Doran. The opportunity has thus been afforded of ascertaining the deficiencies in the series, which it is considered desirable, if possible, to fill up, so as to make the collection a complete exposition of the principal facts of pathological anatomy which are demonstrable by preserved specimens. The College having none of the facilities for obtaining and selecting specimens possessed by the museums attached to hospitals, where operations and post-mortem examinations are of constant occurrence, is entirely dependent upon the contributions of individual members of the profession. In the following list those desiderata are indicated which are most required for the completion of the series described in the first two volumes of the Catalogue—viz., those relating to general pathology and to the injuries and diseases of the organs of locomotion:—Bloodvessels enlarged for collateral circulation; parts enlarged or otherwise altered in consequence of nerve-disturbance; parts wasted through excessive use; fatty degeneration of muscles during fever; fatty degeneration of hypertrophied heart; any well-marked colloid degenerations; acute atrophy of liver or other organs; illustrations of healing by grafting illustrations of inflammatory softening of parts; specimens of elephantiasis mutilans; specimens of noma or cancrum oris; specimens of simple hyperæmia, passive or active; cystic distension of veins or lymphatics; cystic nævus; diffuse fatty growth, e. g., on the nape or under the jaw; nævous fatty tumour; pharyngeal fibrous polypus; painful subcutaneous tumour; keloids of all kinds; arterial angioma (aneurism per anastomosin); lymphatic angioma; fibrous tumours in nerves; sarcomata of all kinds, if authenticated or capable of authentication by microscopic examination; cylinder-celled epithelial cancer; clots of blood showing pigmental or calcareous change; clots of blood softened or with suppuration; atrophy of muscles in infantile paralysis; atrophy of muscles in pseudo-hypertrophy; atrophy of muscles in progressive muscular atrophy; effects of inflammation of muscles; syphilitic gummata in muscles; sloughing and other effects of inflammation of tendons or their sheaths; incomplete fractures ('green-stick' or others); enlarged condyles from cases of genu valgum or the like; elongated and curved tibiæ; soft ribs or other bones from insane persons; inflammatory exudation in bone; bones affected by arsenic; thickening or overgrowth of articular cartilage; any diseases of fasciæ; osteo-myelitis; congenital and infantile syphilis of skull &c.; puerperal osteophyte of skull; necrosis of epiphyses; joint distended with synovial fluid (hydrarthrosis); joints showing effects of acute rheumatism, of pyæmial disease, of exanthematic febrile, or of gonorrhœal disease; capsular (extra-articular) anchylosis; dislocations (recent or old) at wrist or ankle or in hand or foot; anterior curvature (lordosis) of spine; spondylitis deformans; diseases of joints in locomotor ataxy."

Dr. Henry Thompson's lecture has been received, and is marked for early insertion.

Mr. Nettleship is thanked. As soon as other contributions to the column are received, his note shall be inserted.

X. Y. Z. had better refer to our advertising columns.

J. B. S.—Our space is much occupied.

"THE EAST WIND AND ITS EFFECTS."

To the Editor of THE LANCET.

SIR,—Under the above heading in your last issue, the organism mentioned by Mr. S. Smith seems to me to bear a strong resemblance to the "goblet-cells" noticed in "Quain," vol. ii., p. 211; the mucus, in Mr. Smith's specimen, being collected at the attached end of the cell.

I am, Sir, yours respectfully,

Cambridge, Jan. 19th, 1880. H. OWEN, Student.

J. L.—We are not aware of any such work. We must decline to recommend tradesmen.

Mr. R. T. Cæsar.—We shall be glad to have the notes mentioned.

Dr. Thos. Cole.—One of the nursing establishments in connexion with large hospitals.

Mr. J. Rogers.—We do not prescribe.

ERRATUM.—By inadvertence the name of Dr. John Harley was mentioned as forming one of the Clinical Committee of the Clinical Society in our report of last week. It should have been *Dr. Dyce Duckworth.*

IT is requested that provincial papers sent for the information of the Editor may be marked so as to direct attention to the medical or sanitary matters it is desired to notice.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Sturges, London; Dr. B. Hicks, London; Dr. Goodhart, London; Mr. Teevan, London; Dr. Duckworth, London; Mr. H. Smith, London; Mr. Gamgee, Birmingham; Dr. H. Thompson, London; Dr. H. Tibbits, London; Mr. Blackburn, London; Dr. Foster, Bicester; Mr. Nixon, Plymouth; Dr. Szalardi, Budapest; Mr. Brook, Huddersfield; Mr. Budd, Edinburgh; Messrs. Boyle and Sons, Glasgow; Mr. F. Shapley, London; Mr. Cable, Greenwich; Dr. Clifton, St. Leonard's; Dr. Eberle, Easingwold; Mr. Sealy, London; Mr. Morris, London; Dr. Galton, Anerley; Mr. Beedell, Tiverton; Dr. Macnab, Bury St. Edmonds; Dr. Alford, London; Surgeon-Major Curran, Warrington; Dr. Britton, Halifax; Mr. Trenerry, Bristol; Mr. H. T. Wood, London; Dr. Thin, London; Mr. Hoather, Brighton; Mr. Lowland, Fulham; Mr. Austin, London; Mr. Spowart, Sheffield; Dr. Dolan, Halifax; Mr. Swan, Batley; Dr. Hardwicke, Rotherham; Mr. Green, London; Mr. Atkey, Chichester; Mr. Watkin, Kentucky; Mr. Porter, Malta; Mr. Pusey, Liverpool; Dr. Lovett; Mr. Kemp, London; Dr. Palm, Largs; Mr. Osborn, London; Dr. Hoggan; Mr. Southam, Manchester; Dr. Skerritt; Dr. Blake, Great Yarmouth; Mr. Manley, East Rudham; Mr. Barnard, Edinburgh; Mr. Nettleship, Wimbledon; Dr. Blandy, London; Dr. Bury, Pendleton; Dr. Taylor, Trowbridge; Mr. Owen, Cambridge; Dr. Cole, Bath; Mr. Penny, Wymondham; Mr. Cæsar, Shirley; Mr. Stodart, Edinburgh; Mr. Shepherd, Liskeard; Mr. Peart, North Shields; Mr. Burman, Bamburgh; Dr. Fleming, London; Messrs. Letts and Co., London; Mr. Frampton, Weston-super-Mare; Mr. Dow, London; Mr. Appleton, Highgate; Mr. Stratton, Wilton; Mr. Jameson, London; Mr. W. C. Williams; Mr. Best, Tenbury; Dr. Ritchie, Edinburgh; Dr. Skinner, Harpurhey; Dr. Lane, Pembrook Dock; Mr. Harthill, Willenhall; Dr. Bantock, London; Dr. W. Cottle, London; Dr. Squire, London; Mr. Magnus, London; Dr. Dallas, New York; Dr. Ciarmally, Naples; Mr. Pitman, Cannes; Surgeon-Major Wolseley, Halifax, Nova Scotia; Mr. Delzey, Lesmahagow; Dr. Little, London; Dr. Radford, Higher Broughton; Mr. Rogers, Peckham; Dental; S. C. N., Oakham; X. M. A. S.; T. L., Cambridge; X. Y. Z.; &c.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Thomas, Egerton, Australia; Dr. Lattey, Southam; Dr. Symes, Halifax; Mr. Arnison, Stanhope; Mr. Prichard, Northampton; Mr. Mawes, Nottingham; Dr. Birchell, Kingston; Mr. Tainton, Hackney; Mr. Elliott, Carlisle; Mrs. Congdon, Liskeard; Mr. Lawson Tait, Birmingham; Mr. Harrison, Keighley; Mr. Bernard, Hemel Hempstead; Mr. Scott, Liverpool; Dr. O'Grady, Hyde; Mr. Fonmartin, Portland; Mr. Quinton, Hull; Mr. Johnson, Winchester; Mr. Gawith, London; Mr. Edwards, Buntingford; Messrs. Garraway and Co., Faversham; Mr. Clacher, New York; Messrs. Harthill and Co., Willenhall; Messrs. Black, Edinburgh; Messrs. Edis and Cooper, Huntingdon; Mr. Fisher, North Kensington; Mrs. Herring, Torquay; Mrs. Vincent, Lincoln; Mr. Dicey, Northampton; Mr. Edwards, London; Mr. Brocklebank, Islington; Mr. Wheeler, Ventnor; Mr. Glover, Shrewsbury; Mr. Rigden, Taunton; Mr. Smith, Redditch; Mr. Underhill, Edinburgh; Mr. Grace, Newcastle-on-Tyne; Mr. Staple, Crewkerne; Miss Smith, Braintree; Semper; G. F. E., Holloway; Epsilon, Maida-vale; A. B., York; Unqualified Assistant; R. J. S., Liverpool; S. D. S., M.D.; E. H. B., London; Gamma, Gorton; C. J. M., Dublin; M.D.; Sigma, Burnley; J. F., Derby; Radix; A. K., Horncastle; E. W. C., Cambridge; J. G. C., Brasted; W., Craven Arms; Ch.; Alpha, Norwich; N. R., Trengathel; M.D., Bath; X. Y., Blackheath; Tibia, Manchester; Medicus, Chipping Campden; K.; P. H., Stoke Newington; A. B.; F. G., Rochester; Y. Z., Huntley.

Daily Chronicle, Western Daily Press, East London Observer, Cornish Telegraph, Le Moniteur du Commerce, Dover and County Chronicle, &c., have been received.

NOTICE.

THE LANCET is now Enlarged to EIGHTY PAGES, giving additional space for the Scientific Papers of our Contributors. A first issue will be made each week at Seven o'clock on Friday morning, *for the Wholesale Houses only*, to facilitate the delivery in country districts soon after the arrival of the early trains. The Journal is also CUT AT THE EDGES. Another new feature is an INDEX to ADVERTISEMENTS, and their classification as far as possible, with NAMES of ADVERTISERS. (*See p. 2 of Advertisements.*)

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Medical Diary for the ensuing Week.

Monday, Jan. 26.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS. — Operations 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; on Tuesday, 9 A.M.
MEDICAL SOCIETY OF LONDON.—8½ P.M. Dr. Cockle (the President) will bring forward a Case of "Obstructive Aortic Disease" and a Case of "Double Ptosis."—Dr. Carpenter, of Croydon, "On the Treatment or Leucocythæmia."

Tuesday, Jan. 27.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.
ROYAL INSTITUTION.—3 P.M. Professor Schäfer, "On the Physiology of Muscle."
ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8½ P.M. Mr. Christopher Heath, "On a Case of Aneurism of the Subclavian Artery treated by Amputation at the Shoulder-joint and the Introduction of Needles into the Sac."—Dr. Vandyke Carter: "Contributions to the Experimental Pathology of Spirillum Fever."

Wednesday, Jan. 28.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at 1 P.M.
LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.
HUNTERIAN SOCIETY.—8 P.M. Dr. Braxton Hicks, "On Obliquity of the Pregnant Uterus."—Mr. Clement Lucas will show a Case of Aneurism by Anastomosis of half the Face.

Thursday, Jan. 29.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—1½ P.M. Surgical Consultations.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.
ROYAL INSTITUTION.—3 P.M. Professor Dewar, "On Chemical Progress."

Friday, Jan. 30.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 2 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Evening Meeting.—9 P.M. Mr. J. Marshall, "On the Proportions of the Human Figure."

Saturday, Jan. 31.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Professor T. Rupert Jones, "On Coal."

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N.B.—All letters relating to Subscriptions or Advertisements should be addressed to the Publisher.

NOTICE.—Advertisers are requested to observe that it is contrary to the Postal Regulations to receive at Post-offices letters addressed to initials only.

Agent for the Advertising Department in France—

M. BERTHIER, 104, Boulevard St. Germain, Paris.